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# AMIGA SHOPPER

Issue **69** December 1996 **£4.50** US \$9.95 • Hfl 19.95

## State of the art

Is *Art Effect* the most powerful  
Amiga graphics package?  
Find out how this cover  
was created and  
read the full  
review, p14

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Full details on page 8

### Inside this issue

- **State of the art:** The first and most complete review of the hot new graphics program, *Art Effect*. We've taken it and put in through all the tests.
- **Directory Opus 5.5:** After a further 12 months of development, is this the program we wanted?
- **CD drives:** The new generation of drives that take the A1200 past its previous IDE limitations.
- **OctaMED SoundStudio:** The brand new version of *OctaMED* promises to put the Amiga back at the forefront of computer-generated music.
- **Quarterback:** Repackaged and re-released as a new bundle, the *Quarterback* suite could prove invaluable.
- **CyberStorm II:** What makes this accelerator card for the A4000 so special? We find out.
- **Amiga Answers and Public Domain:** The answers to your technical questions and all the new PD.
- **Tutorials:** *CanDo*, *Blitz BASIC 2* and a special WWW HTML page creation tutorial.

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# Inside Issue

*Among the excellent new releases we feature this month, there's a brand new and exciting art program. Could this be what we need to put the Amiga back on top form again?*

It seems to me that there is only a limited point in comparing the new *Art Effect* program to its Amiga competitors. Although it might prove to be better than these programs (read the feature starting on page 14 to see if we think it is), the real question for the long-term survival of professional programs is whether they can compete with the other platforms. There was a time, not that long ago, when Amiga owners could happily scoff at the PC's poor graphics handling. Those days are gone and



with *PhotoShop*, *PaintShop Pro*, *Corel Paint* and others, the PC now has a set of programs that can do things which the Amiga can only dream about.

Does *Art Effect* redress the balance and set the Amiga

back at the forefront? Well, it does show once more what can be done with a low-end machine. None of the flash effects can be done on a 386 and I doubt that there are any 286 users out there who even know what a graphics application is. Yet here is a program

that can apply spectacular filters on an 020-based machine.

This is all well and good, but to get back ahead of the competition – if such a thing is still possible – there need to be applications which can do more. And to do more the mean user base of Amiga owners needs to be raised. We think of users with 8Mb RAM expansions as very lucky, but the price of RAM has fallen now to a level where it so cheap that every serious user should be at least at this level.

It's also time to look to the future and accept that 020s and 030s should be abandoned. If you want to do serious rendering or graphics work, you need at least an 040, even then you'll hanker after the extra speed of an 060. It's a vicious circle. Few want to invest in new hardware until the future looks more rosy, but without a decent user base, developers can't create these killer applications, so they write for lower spec machines. This discourages programmers because they want to produce high quality goods and to do that they have to be able to make use of decent hardware.

Will this all change when Viscorp finally get out a new machine? The Amiga community is fiercely loyal, but that loyalty has been tested to its limits. Viscorp is moving; it recently showed a prototype casing giving an idea of its direction, but surely it is aware that looks aren't enough. A machine with bite, power and a low price is needed... and soon.

All this said, there have been some excellent releases of late. *Art Effect* is one and we've got the rest reviewed this issue. This includes the new systems which use IDEFix to allow four IDE drives to be attached to an A1200. Well, it at least makes even more cheap PC hardware available to us all. Enjoy.

David Taylor,  
Deputy Editor

Turn the page for the contents of issue 69

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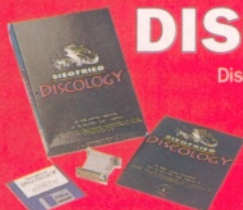
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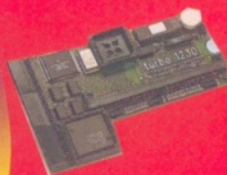
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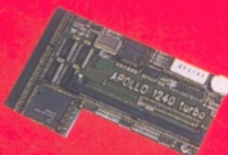


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# AMIGA SHOPPER

## Shopper**Features**

### Art Effect 1.1 \_\_\_\_\_ 14

The Amiga has a new graphics program and already people have been heralding it as the greatest Amiga graphics package ever. Can a standard A1200 really compete with professional Macs for graphics quality?

In our extensive in-depth review, **David Taylor** looks at all the features and compares the program with its competitors both on the Amiga and on other platforms.

To give you a better idea of the program's capabilities, we also guide you through the creation of this month's cover image which was put together using Art Effect.



*Art Effect has an abundance of filters that can transform a picture in seconds.*

### Quarterback Suite \_\_\_\_\_ 26

Repackaged and re-released **Ben Vost** reveals why this new low cost collection could be the answer to your backup prayers and disk problems.

### Cyberstorm MkII \_\_\_\_\_ 28

The latest version of the accelerator board that makes all Amiga owners drool. What new features have been incorporated into this new model and does it match up to some strong competition? **Simon Goodwin** finds out.

### CD-ROMs \_\_\_\_\_ 30

Move over Encarta? **Ben Vost** takes a look at the Amiga's first serious attempt to produce a multimedia encyclopedia. And it comes with a difference. If you can't find the entry that you want then simply create your own.



*IDE drives are much cheaper than SCSI and you can now have up to four on one A1200.*

## Shopper**Reviews**

### Directory Opus 5.5 \_\_\_\_\_ 20

After a further twelve months of development, does the new version of DOpus supply all the features we want? **Graeme Sandiford** takes the program through its paces and reports back.

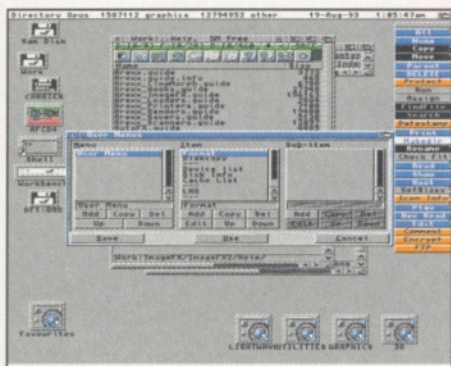
### CD-ROM Drives \_\_\_\_\_ 22

After years of being restricted to a single IDE drive, the A1200 can now be expanded further with cheaper hardware. **Graeme Sandiford** tries out two IDE solutions one of which can have up to four IDE devices attached.

### OctaMED Soundstudio \_\_\_\_\_ 24

The new version of OctaMED could make the Amiga the greatest music maker yet.

**Paul Overaa** finds out what it has to offer.



*DOpus 5.5 is finally here and we reveal what twelve months have done to improve matters.*

## Shopper**Tutorials**

### WWW Tutorial \_\_\_\_\_ 42

The software on this month's disk makes creating your own HTML web pages easier, but this tutorial leads you step by step through the process. **David Taylor** also gives the code for users who don't have MUI.

### CanDo Tutorial \_\_\_\_\_ 44

**John Kennedy** brings more details of getting the most from the excellent Coverdisk.

### Blitz BASIC \_\_\_\_\_ 46

**Paul Overaa** starts a new series which helps Blitz users get the most from the program.

## Shopper**Regulars**

### Coverdisk \_\_\_\_\_ 8

The WWW creation tool Web Plug and a complete add-on for DOpus 5+ are just the starters on this month's feast of programs.

### News \_\_\_\_\_ 12

### Amiga Answers \_\_\_\_\_ 33

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### Public Domain \_\_\_\_\_ 37

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### Letters \_\_\_\_\_ 48

Tales of joy and woe from your good selves given a sympathetic ear by us.

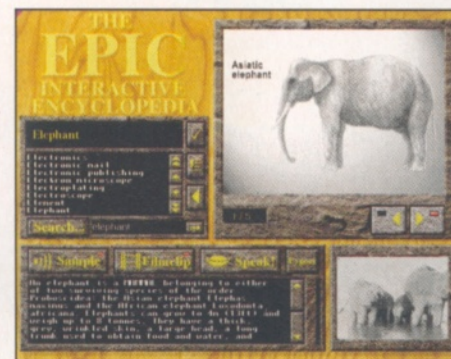
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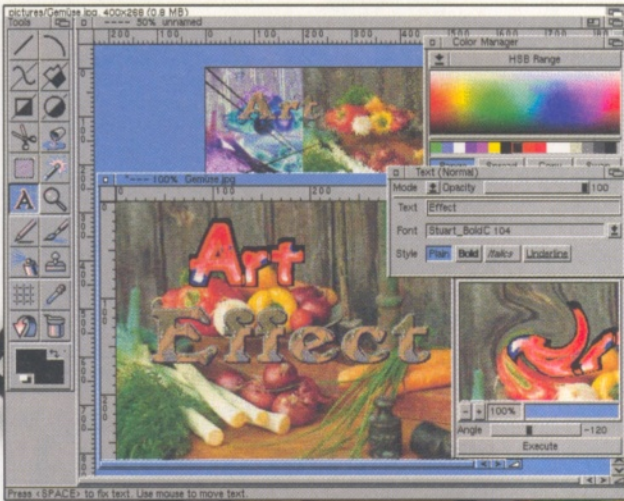
### Reader Ads \_\_\_\_\_ 32



*Interactive encyclopedias are common on the PC, but here is the first for the Amiga.*



# State of the art



## ShopperDisk

A really invaluable disk this month.

### ApplicationZone \_\_\_\_8

Web Plus helps create HTML code; Magnum Opus is the add-on for Directory Opus 5+; CoolO expands programs to use datatypes and Flam is a 24-bit plasma flame generator.

### UtilityZone \_\_\_\_9

Expand AmigaDOS and gets the best out of your memory with this month's utilities.

### ProgrammingZone \_10

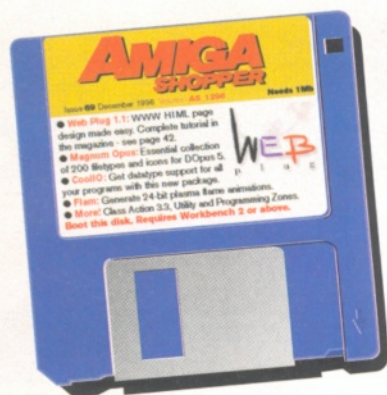
Find the code for the new Blitz tutorial and in addition we've got the XFA Developers Kit – the file format used by X-DVE. Included here is example code for AmigaE, Blitz and C.



*You want to read the first and most comprehensive review of the new art package? David Taylor has all the details and tells you what you need to know about this revolutionary product.*

## Page 14





# Coverdisk

**David Taylor** introduces the amazing extravaganza of programs packed onto this month's single floppy, with applications and utilities to make you tingle.

**L**ast month we gave you several large programs so this time we've selected a veritable plethora of goodies. With an HTML editor, a set of definitions and configurations for Directory Opus 5, the OS expanding ClassAction and CoolIO, you can see why this month's Coverdisk is such a valuable addition to your software collection.

## Application Zone

### WebPlug 1.1

Author: Esteve Boix

This month we are running a quick tutorial on creating your own HTML pages and to help you, we've included this new HTML editor. This editor will automatically generate the surrounding code which defines HTML styles, saving you the job of typing it all in. You can even send out documents directly to your Web browser so that you can preview your work. WebPlug requires MUI to run and you can find out more in the full tutorial on pages 42-43.

### Magnum Opus

Author: Richard Lane

This is an expansion package for Directory Opus 5.11 users. It includes nearly 200 filetypes and a collection of unique toolbar icons. Installing the

**ClassAction: View and edit different files, and use the file management capabilities.**

*Although already configured for some file types, it really comes into its own when you configure it for your own needs.*

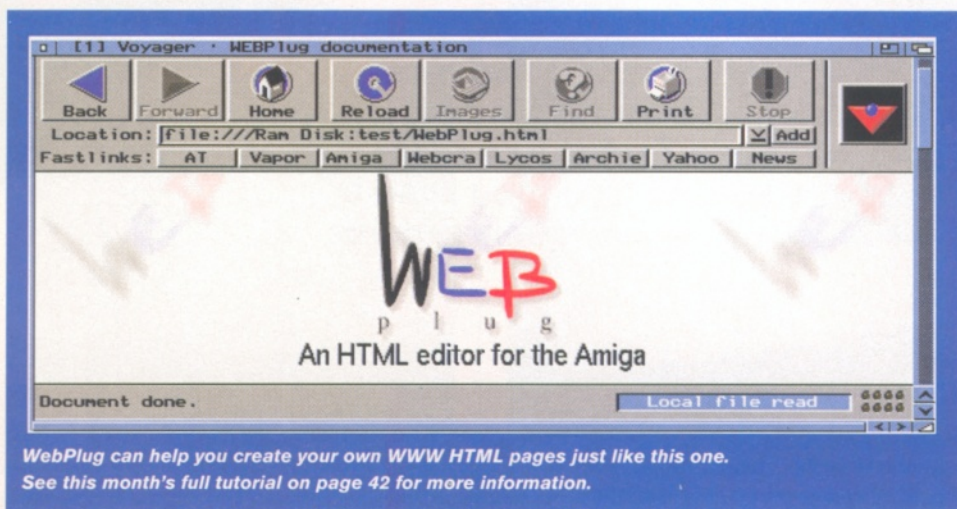
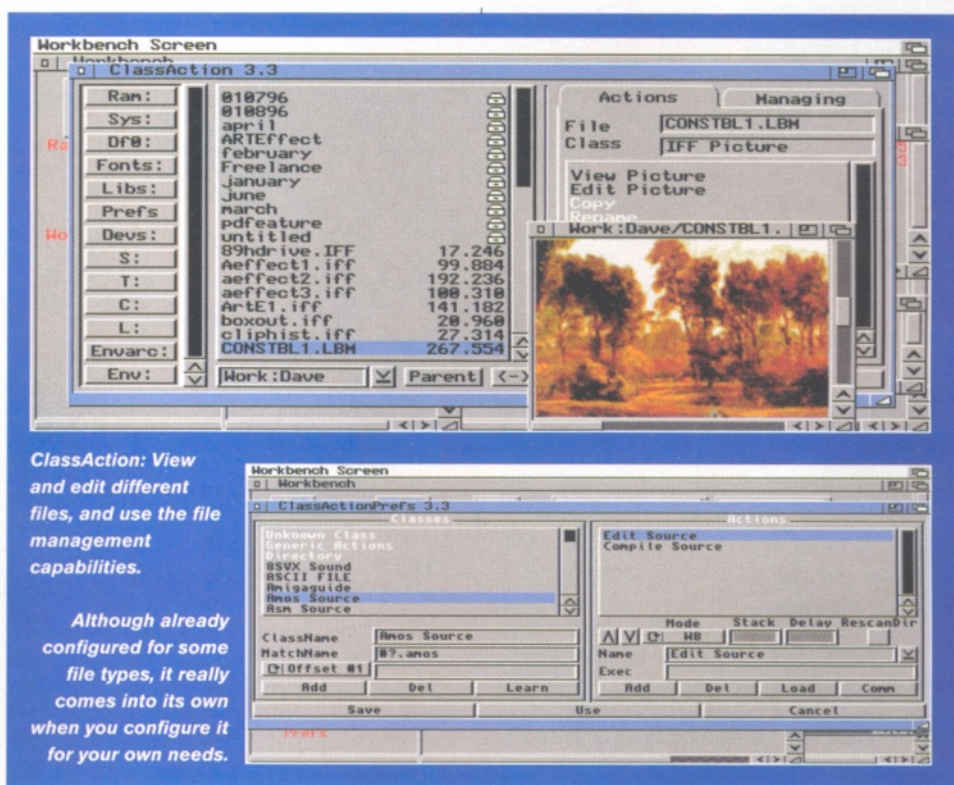
package is easy. All you need to do is copy the files into the sister directories within the DOpus 5 directory. Note that should you simply want to test these additions, you should rename your

original directories first as this will overwrite some earlier filetypes. You can use the icons when you're creating your own toolbars to make your environment more attractive. There's also some documentation on one of DOpus's hidden features! The extensive AmigaGuide gives all the details of the filetypes on offer, and what they allow you to do, but for a quick list of them take a look at the FileType box. Many thanks to the author, Richard Lane, for submitting this package for inclusion on our disk.

### ClassAction 3.3

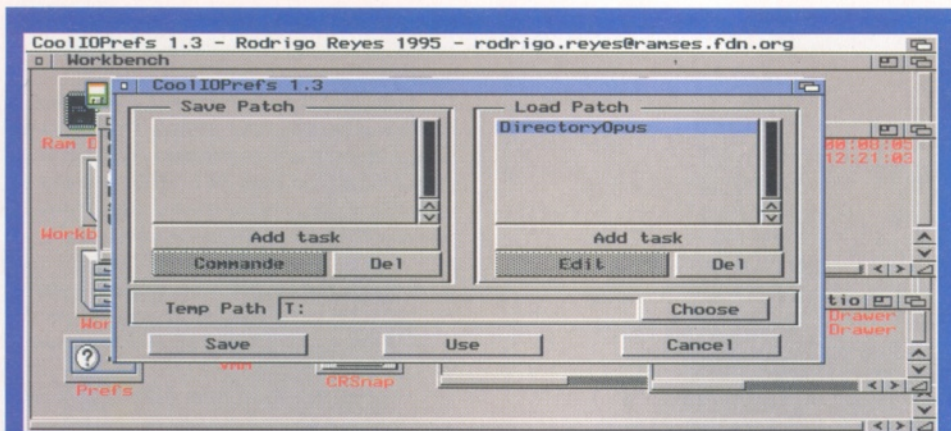
Author: Gasmi Salim

Few people with hard drives cannot have seen or heard about ClassAction. This latest release is now Mailware and has full ARexx support as well as file managing abilities. Essentially ClassAction is a program that determines what type of file you have selected and offers you a set of appropriate actions for use on that file. It also allows external programs to be launched as the program is fully configurable. This means you can



WebPlug can help you create your own WWW HTML pages just like this one. See this month's full tutorial on page 42 for more information.





This simple preference program allows you to choose which programs will use the CoolIO datatype support.

see pictures, hear Mods and samples, extract archives and play multimedia scripts. In fact, you are limited only by your system and your imagination.

While ClassAction comes with support for all of the mentioned files, you really need to configure the program to your own programs in order to get the most out of it. This is very easy to do as there is a separate preferences program supplied with the package that allows you to edit filetypes and add new ones quickly.

This package includes two versions of the program, one for MUI and one for Gadtools, so make sure that you use the one that suits your system.

## CoolIO

Author: Rodrigo Reyes

The argument over the usefulness of datatypes still rages. Some say that they are not worth the trouble, whilst others point out that no other platform has a system which allows any program, to be continually expanded by users, to support whatever filetype takes their fancy. Whatever your opinion, it can't be denied that the ability to use a new picture type without having to upgrade your program is something good. Take the recent PNG filetype – older programs which offer good file support can't deal with this, but there is a datatype available so any program that uses them can now load the images.

The only problem is that not all programs use datatypes, particularly older ones. Datatypes require Workbench 3 (and therefore so does this program) and few programs were written with this in mind. CoolIO is a program that overcomes this by patching programs so that they can use datatypes! Yes, you can now load GIFs into DPaint, JPEGs into Lightwave, etc!

The program itself is a commodity, so you can place it into your WBStartup drawer. The preferences program can be placed anywhere and you use this to decide which programs will use CoolIO to load files. Not all programs will accept it and some are not applicable so this is the reason for using a preference list.

## Flam

Author: Allenbrand Brice and Butterlin Noël  
Have you ever wanted to create a flaming good picture, but never managed to quite re-create

that authentic fiery look? This program, which comes in a variety of versions for different processors, is the answer.

Flam creates its own plasma fire pictures of any size, limited only by memory, and saves them as full, 24-bit IFFs. When you load the program you can see that it is very easy to use. All you need to do is set the width and height as well as a destination and filename.

Then just decide on the number of images and set some of the flames parameters – like the size of the base of the flame, the spread at the top, the turbulence of the flames and the centre point.

As you can see from the example animation included with the package, Flam is certainly capable of producing life like burning fires.

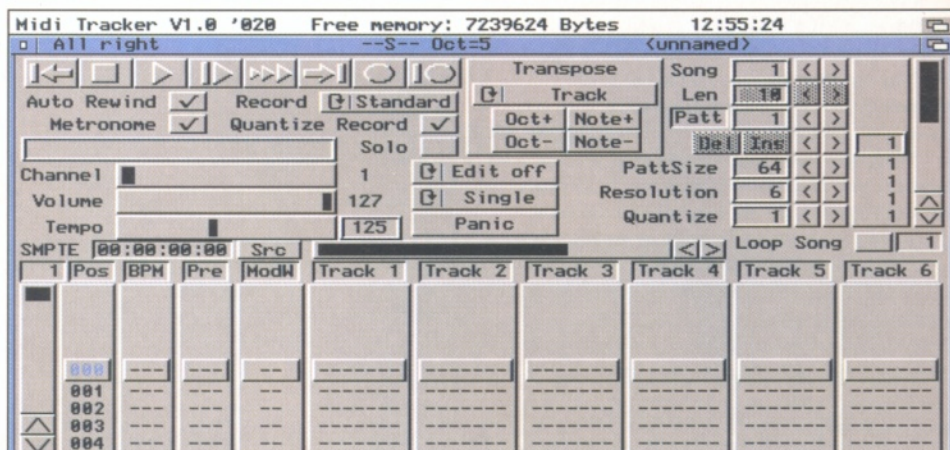
## Utility Zone

### SurveyMem 3.07

Author: "The Cyborg"

This is a program small in size, but big on possibilities. It is a memory meter which can be configured to your own requirements and then adjusted so it displays information in the way you choose.

SurveyMem is font sensitive and allows you to enlarge the window from just a small bar showing the chip mem right up to a huge one with graphs illustrating all the memory usage.



The interface to Flam allows you to set the parameters easily and quickly for unique flames.

## DOSPrefs

Author: Norbert Püschel

DOSPrefs is a small commodity which does three things. Firstly it offers a patch to allow the Unix Dir format in the CLI – that means that you can now use the DOS standard "cd ." to move up a directory, which is useful if you use different platforms and keep using the wrong syntax. It also enables the "\*" wildcard feature so you can use this syntax in the CLI for filenames, eg. \*.iff.

As a little extra, you can disable the clicking of floppy drives. The program doesn't pop up its interface by default (although you can change this in its tooltypes) but you can open it by holding down Alt-d.

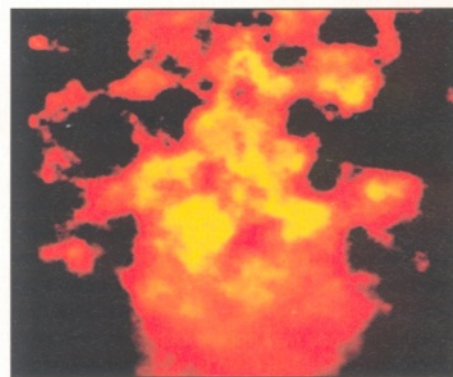
## StartMem

Author: Ron Porath

If you have a hard drive, then you probably wonder where all that memory goes when you boot up before you've even loaded any programs. A lot of memory is taken up by the different programs loaded in the startup-sequence or user-startup and possibly in the WBStartup drawer.

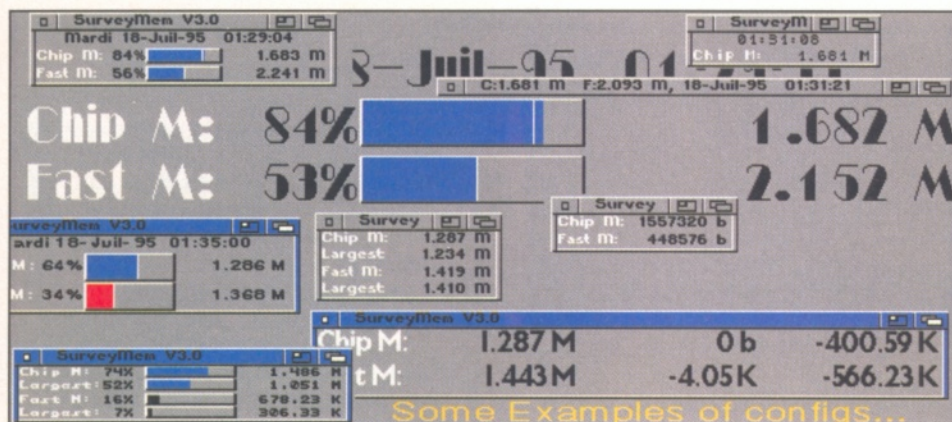
This program will patch itself in and file a report on what programs use up all that memory. You can then take a look and remove any from the startup which steal too much allowing you to optimise your system for standard use.

Obviously you can't remove essential functions, but you can take out any extra ones and then simply load them up when you need



The Flam program produces realistic plasma flames and works well creating animations.





*Survey Mem gives you the chance to customise your memory meter to meet your specific requirements, but remains a small overhead itself.*

## Disk contributions

This month's disks were compiled using files from Aminet and with the help of the authors of the programs.

If you would like to contribute to a future disk, whether you have a full application, utility, 40K demo, clipart, font, 3D object, or even a module, send it to:

David Taylor,  
Amiga Shopper Coverdisk Contributions,  
30 Monmouth Street,  
Bath, Avon BA1 2BW.

Please only send the minimum distribution archive. Also, please do not powerpack (or similar) any files because it detracts from the archiving.

them. Be warned though, only use this program and start editing your user-startup if you know exactly what you are doing!

## 256 Colour

Author: Burnsy

This program is a simple command that patches up a colour error problem. The problem is caused by the palette and occurs with 8-colour icons. These icons don't use the correct palette because four of the palette colours are set up by IPrefs.

Some icons may appear correct by being 8-bit, but this makes them larger than necessary. 256 Colour sorts this problem out so that all icons use the correct colours.

## DIP

Author: Shamus Husheer

This program reads a floppy disk to an image file. You can then archive the file using an archiver producing much better results than you could get with DMS.

There are more uses for this program, for example, you can use it to read non-DOS disks to virtual devices so that they can be run from there instead.

## AIFF datatype

Author: Olaf Barthel

AIFF is a datatype for the Audio Interchange File Format used on the Mac and this little program enables you to load and use these sound samples in your work.

## CenterWin

Author: Timo Nentwig

This program allows you, with the aid of a hotkey, to centre the selected window on the screen. It can also be used to minimise and restore windows.

## BFC

Author: Shamus Husheer

This is a very small split/join command that will take a large file and automatically split it into disk sized chunks which are then copied straight onto floppies. This same command can then re-compile the file at its destination.

## AltTab

Author: Burnsy

This command sets up a hotkey (Alt-Tab – surprisingly!) which can be used to cycle through windows, bringing the selected one to the front. It is a little like the screen tabbing programs available except this deals with windows.

## Programming Zone

This month we've started a new programming tutorial on Blitz BASIC and you can find the code that accompanies it here.

## Dodgy disk?

To avoid errors when installing to floppies, ensure that your destination disks are of high quality. If an error occurs, try re-booting and using a different spare disk – the majority of errors are caused by faulty destination disks.

If your Coverdisk absolutely refuses to work and you are certain it is faulty, please return it, along with an S.A.E., to the address below. Please do not send faulty disks to the Amiga Shopper offices.

Amiga Shopper Coverdisk  
(insert the name of the disk),  
TIB plc, TIB House,  
11 Edward Street,  
Bradford  
BD4 7BH.

If you want to give it a go then check out the tutorial itself which can be found on pages 44-45.

In addition we've got the XFA Developers Kit. This is the file format used by X-DVE and is a super smooth animation format. Included in this kit is example code for AmigaE, Blitz and C so that programmers can start to support the format and use it themselves in their work.

Well, that just about wraps up another Amiga Shopper Coverdisk and you can see that we weren't exaggerating when we said that it was packed full of goodies.

Hopefully there will be something amongst all that lot that you will find useful. The disk should keep you entertained until we bring you next month's and also prove of long term use in improving your Amiga computing. ■

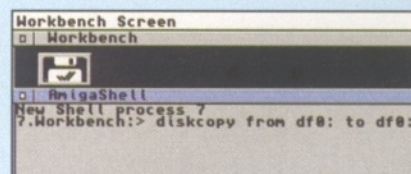
## Beginners, look!



Before using this month's Coverdisk, please be sure to back it up – just in case. Simply follow the easy instructions below.



**1** Boot up from your Workbench disk or partition, double-click on your Shell icon – to be found in your System Drawer.



**2** If you only have one disk drive, type in the following line and then press Return.

Diskcopy from DF0: to DF0:

If you have two drives, place the Coverdisk in DF0: and a blank in DF1:, then type in this line instead:

Diskcopy from DF0: to DF1:

**3** Follow the on-screen prompts and remember that the Coverdisk is the source disk and the blank is the destination.

**4** If you used the two-drive method, remember to rename the copy by clicking on its icon and pressing right-Amiga r.

**5** If you have two drives, you can also copy the disk from Workbench by dragging the Coverdisk icon over the destination disk's.

**6** Then place either of the Coverdisks in DF0: and reset the Amiga to boot it. It is best to boot disk 1 (or the Subs disk if you're a subscriber). This will let you install all the disks to either floppy or hard drive.





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# News

*Uncertainty over the Amiga's future – but promising software releases and price cuts mean it's not all doom and gloom.*

## Confusion reigns over Amiga ownership

**S**eptember 23rd – Although the 30 day extension granted to VIScorp in order for them to sort out details regarding the purchase of Amiga Technologies has now passed, it doesn't appear that the American set-top box manufacturer is any closer to finalising the deal now, than back in April.

Jason Compton, the company's press officer told Amiga Shopper that as soon as there was news to pass on, he would be doing so, but all he could say at the time was that Bill Buck was continuing talks with the trustees appointed to look after Amiga Technologies during this period of

transition and that VIScorp were still firmly committed to purchasing the company.

The fact that no positive announcement has been made is a cause for concern for retailers hoping to be able to sell Amigas for Christmas, traditionally a good time for computer sales.

### New look Amiga

In another VIScorp story this month, the potential purchasers have asked the public to design them a new logo for their company. The logo will appear on all corporate information, but it must be designed with the following criteria in mind:

1. The logo must be in a form that will show up in NTSC and PAL broadcast video;
2. The logo must be in a form that is colour separatable and suitable for print;
3. The logo must incorporate the Amiga double checkmark in the V of VIScorp;
4. The logo should incorporate the Amiga rainbow stripes in the O of VIScorp;
5. The logo must be designed on an Amiga.

Once you've completed your design, send it to VIScorp themselves at the following address:

VIScorp, 11N. Canal St.,  
Suite 933,  
Chicago, IL 60606, USA.



## AWeb goes commercial

AWeb, the speedy, but underspecified Amiga Web browser notable for its lack of use of MUI, is to come out in a new commercial version and will be distributed by Blittersoft in the UK.

The new version will be called AWeb II and will be bundled with Paul Kolenbrander's well-known HTML-Heaven, a set of tools designed to work with any ARExx-supporting text editor to provide speedy HTML creation facilities. Both packages together will cost 39.95.

To assuage those of you worried that you will be asked to part with your hard-earned for a Web browser that can't even centre images and text on a page, fear not, here's a short list of what AWeb II will be capable of:



Support for background images and colours, coloured text and links, image borders, centring, better lists, limited frames support (apparently in the form of a new window), ARExx command set and user-configurable ARExx menu, plug-in support for mail, ftp, telnet and news and support of several other new HTML 3.2 tags. Although this list does not include vital

### CD-Eye

Eyetech have decided to offer Amiga users the chance to make their own peripherals based on their award-winning CD Plus



package. Eyetech are offering the complete drives, as reviewed in this month's Amiga Shopper, but if you already have a hard drive, CD-ROM or removable media drive that you would like to put into a professional-looking case, then Eyetech can supply you with all the parts you'll need – a case, power supply and the necessary cables, all for a very reasonable price.

For more details contact the guys at Eyetech on 01642 713185, or email them at: [eyetech@cix.compulink.co.uk](mailto:eyetech@cix.compulink.co.uk)

support for tables, they are promised, along with further HTML 3.2 tags in a free upgrade to registered users as soon as they are implemented.

The bundle also comes with the aforementioned HTML-Heaven which has been updated for HTML 3.2 support and can now add HTML entities as well, thanks to ancillary program Charrie. In addition, there are plug-ins for AWeb for mail and FTP, along with an HTML to Text converter so that web pages can be printed as formatted text, something that can't be done with current versions of IBrowse.

Users of the shareware versions will be able to upgrade to the commercial version and anyone wanting further details should contact Blittersoft on 01908 261466.



# New version for PageStream

**S**oftLogik have announced that they will shortly be releasing version 3.2 of their flagship DTP software, the first non-beta upgrade released since version 3 was first announced.

A company spokesman said the new release would prove that SoftLogik was committed to continuing to produce quality software for our platform:

"We'd like to thank our customers who have stuck with us through the last couple of years. The only way we can continue to support them is if we release regular upgrades. We've been listening to their requests and have



added some of the most popular features."

Those new features include a configurable toolbar, eyedropper tool, indent tools, a proper pasteboard where items left out are available to all pages, effects filters in PageStream and masking for bitmapped images.

ARexx commands supporting all new features have also been added and although an upgrade price is yet to be set, it is not expected to be high.



*Although the web page now seems to be centred on Mac products, there's still a lot of Amiga info.*

## The sky's the limit

**G**ood news for owners of Syzygy's excellent star gazing program, Digital Universe. They will be pleased to discover that v1.03 has been released as a free upgrade available to registered users. The main changes since v1.02 are as follows:

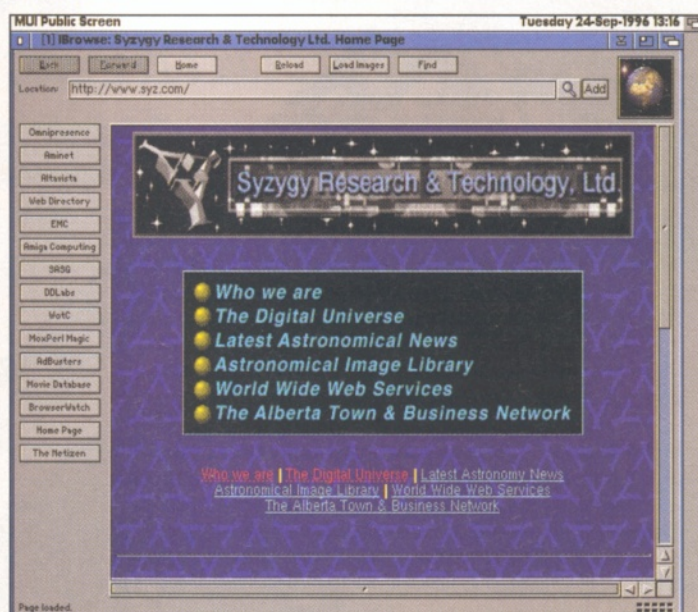
- Sidereal time was being calculated from Dynamical Time, and not Universal time as it should have been. This meant that sidereal time was off by the value of Delta T.

Thus, though the positions of objects with respect to the background stars was perfectly accurate, their positions with respect to the local horizon were slightly off. As a result, rise and set times were off by the value of Delta T.

Since Delta T is currently only about a minute, this bug had gone unnoticed. However 2000 years ago, the difference was almost three hours.

Thanks to Ray Cole for reporting the problem.

- On some monitors, the shade of blue used to represent the Right Ascension and Declination grid was too dark. It has been lightened up to make it easier to see.



*The best astronomy package for the Amiga gets an upgrade, but unless you have an Internet connection and a web browser obtaining it can be hard...*

- If a planet was clicked on while it was being rendered with features, garbage was rendered after the info window appeared. This has now been fixed.

- There have also been several new EOS (earth-orbiting satellite) information files and updated images posted to the Syzygy site at "http://www.syz.com/". For readers that don't have access

to the internet, you can contact Syzygy at:

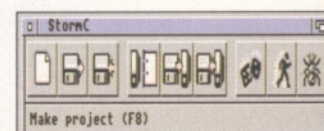
**Syzygy Research & Technology Ltd.**  
Box 75  
Legal, AB  
T0G 1L0  
CANADA  
Or phone them on:  
001 403 961 2213



## Speed cuts from Gordon Harwood

Gordon Harwood Computers have decided to drop the price on their range of accelerators from Phase 5 in Germany. The price cuts, which are effective from the start of September, mean that people can save up to £20 on the cost of Blizzard accelerator cards for the A1200 and as much as £50 on the new Cyberstorm II 68060 board.

Gordon Harwoods will also be bringing several new turbo cards into the country through September and October. The first is a low-cost version of the popular Blizzard 1240 for A1200 tower systems, an 040 accelerator for the A2000 and a 68040 version of the CyberStorm II suitable for use in either the desktop or tower A3000 and all forms of the A4000. If you want more information on the money you can save on Blizzard and CyberStorm accelerators, or you just want more info on the new products being released then contact Gordon Harwoods on 01773 836781.



## Storm for starters

Haage & Partners, the creators of the excellent, but overpriced, Storm C, have announced that they are releasing a starter version of the C++ compiler at a reduced price of \$169 (no UK price yet set). They have also announced that they are hard at work on a special versions of Storm C for developers using Phase 5's next generation PowerPC accelerator card to allow them to create PowerPC native applications, and for ProDAD's forthcoming p-OS system. Both will be demonstrated at the Computer 96 show in Cologne this November. Anyone interested in the new version of Storm C should contact Haage and Partners' UK distributor Blittersoft on 01908 261466.



**Dopus**  
Have they got  
right at last?

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# AMIGA SHOPPER

Issue 69 December 1996 £4.50 US \$9.95 • Hk 19.95

## State of the art

Is Art Effect the most powerful  
Amiga graphics package?  
Find out how this cover  
was created and  
read the full  
review, p14

**Four** disks packed onto one!  
Full details on page 8

Art Effect has taken elements from successful PC programs as well as adding original, new features. But can it succeed and regain the Amiga's lost ground on the graphics front? **David Taylor** puts it to the test and shows you how the program was used to create this month's cover.

**PLUS:**  
**Create your own Web pages**  
A complete tutorial based on software on this month's Coverdisk



**F**or years the Amiga stood apart from its competitors in the art department, thanks to graphics which outstripped the abilities of any home computer. The Mac was adopted by businesses, such as publishing, and the famous *PhotoShop* flourished. Times have changed, though, and even *PhotoShop* has moved to the PC. The Amiga has some adequate graphics applications, but nothing that can compare to the sheer powerhouse of effects and image manipulation that make up some of the reasonably-priced PC software.

*Art Effect* is setting out to change that, taking elements from the successful PC programs and adding some new features beyond those. The big question is whether it can succeed and whether the Amiga can regain lost ground. Find out as we take a look at all the features of this new image manipulation package and compare it with its often-cited PC counterparts.

## Variety is the spice...

There is more than one way to skin a cat. *Art Effect* illustrates how true this can be. Not only does it offer a long list of features, it also enables you to go about your project in several different ways. You can obtain exactly the same result by taking a variety of routes.

Although much has been made of this program in terms of rivalling the power of other applications, there are some important things to consider. *Art Effect* can be bought for under £100. The all-singing, all-dancing *PhotoShop* retails for around 10 times that price.

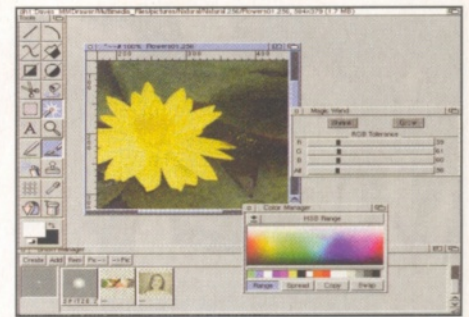
The program does take on a more standard look, much more familiar to PC users. There is a floating toolbar and a set of optional windows, from Brush Manager to Palette Control. The pictures can then be opened in their own window and any effects or changes are accessed from menus. This means that it has the comfortable feel that word publishers on the Amiga have adopted, like *Wordworth* and *Final Writer*. It is more accessible than the likes of *Photogenics 2* or *ImageFX* for this reason.

A clean interface helps you work more efficiently – this type of interface shows efficient program planning.

Although *Art Effect* technically runs on an A1200, you really need more memory. For the purposes of this review, *Art Effect* was run on both an A1200 with an 030, FPU and 4Mb Fast RAM and an 060 with 8Mb Fast RAM. The big difference was with the RAM, although the faster processor was obviously a help. For work with any decent-sized image, or at any reasonable resolution for serious work, I would suggest you need at least 16Mb RAM. This is



The Oil Painting filter is one of the most convincing, it can turn snapshots into masterpieces in seconds.



This flower has been selected easily using the Magic Wand tool at a decent tolerance. It can now be inverted and picked up.

nothing to do with the program, but more to do with the large amount of memory required for 24-bit images.

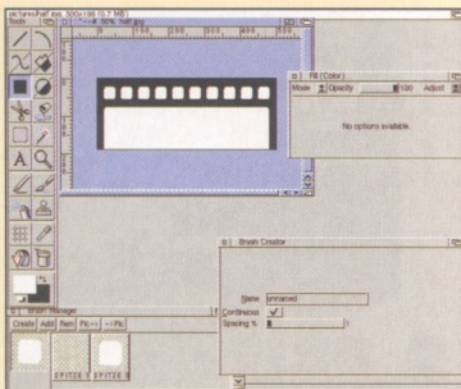
## What's the story?

The big question is what can *Art Effect* do? Well, it has the standard drawing tools which you'd expect in a paint package, such as Line, Freehand, Box and Circle. However, although it operates adequately as a paint package, I doubt anyone will want to buy it primarily for that purpose, because it really needs to be run in hires laced for work and this tends to make the interface sluggish to respond, except on an 060. These drawing tools are more useful for touching up pictures that you are manipulating.

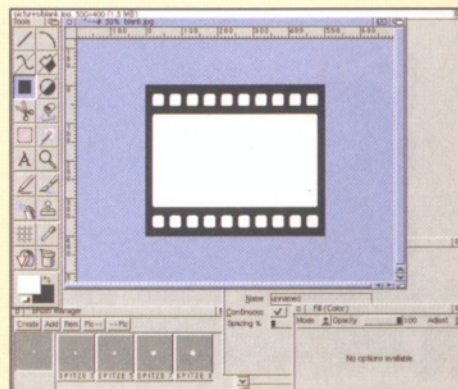
*Art Effect* is really positioned as an effects package. With it you can take scans or pre-drawn pictures and alter them beyond recognition. As with other programs of this type – such as *Photogenics*, *ImageFX* and *Art*

16

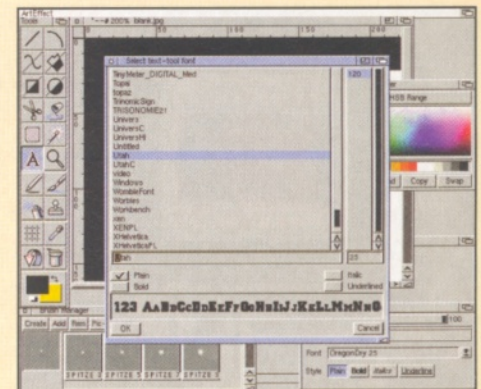
## How the Amiga Shopper cover was created using Art Effect



**1** The first step was to create a blank film cel. There are many ways to do this in *Art Effect*. The image looks small, but it is set to 250dpi, which is necessary for adequate detail on the cover. This is different to the default 72dpi and means that the sprocket holes had to be around 30 pixels wide. The easiest way was to create a box with slightly bevelled edges. This was done using a circular brush, drawing a square and filling it in white. Picking it up as a brush, it was then laid along the strip using the Straight Line tool, with brush spacing set up high so that the holes were set far enough apart but equidistant.

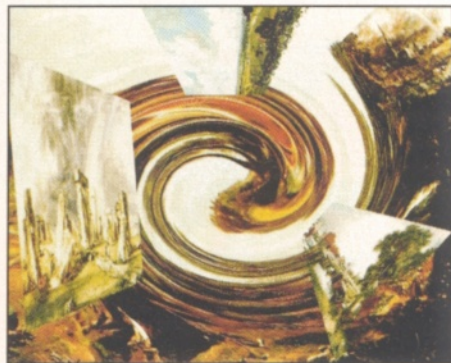


**2** With the top half of the frame completed, the rest of the frame was finished by making use of the Mirror filter which takes a varying degree of the picture and then mirrors it either horizontally or vertically. This was mirrored vertically. Thanks to the preview window which shows you how the picture would look, it is possible to adjust the degree of the effect until it has the correct amount of mirroring.



**3** To make the frames look more individual, some text was added above and below the holes. *Art Effect* shows a preview of any font you choose and it supports the colour fonts which Font Machine produces. The font size used was 25 point, which normally appears quite large, but because of the dpi of the frames, it looks small.





*It handles brushes well and can crop, re-size, alter perspective and turn pictures with ease.*

*Department Professional* – you can add filters to the pictures, or to parts of them, to change their appearance. These filters are split into sub-groups of similar types. There are ones to alter colour, such as adjusting the colour levels, and the Antique effect which changes a picture into an old-style photograph.

There are blurring and sharpening tools to adjust the quality of the image and ones for changing the look of the picture to a different type – like an oil painting or a wax drawing. Most of this type of work can already be done with existing packages.

## Wave a magic wand

But there are a couple of features which can be used in conjunction with any of the others, that make this package more powerful.

The first, and by far the most important, is the Magic Wand tool. This enables you to click

on any part of the picture and the program will select any connected pixel of that colour. You can then adjust the tolerance level so that it selects similar colours up to a specified degree of difference – you can even adjust the level of difference between the colour levels (RGB). Selecting an area in this manner makes it easy to pick up people or objects from a normal photographic background, which won't be of exactly the same colour, even if the picture was taken specifically for the purpose of cutting out.

The Magic Wand tool can even make a reasonable job of selecting objects from general photos. When you start selecting parts of the picture like this, you aren't restricted to selecting a single part or colour type at once. You can select one part that is predominantly green, say, and then hold down Ctrl and select another which might be a different colour. It makes it a very powerful tool – one which has been around in other programs for some time, but which has never made it into this level of Amiga graphics package.

The next exceptional feature is the Paper Type. This enables you to load in a picture and then select a paper type which sets what type of material the picture is supposed to be on. For example, you could load in a cartoon and then make the program simulate it as being drawn on glass or wood, which will adjust how tools and lines appear on it.

Add to this the different types of brushes – Pencil, Paint Brush and Spray Can – and the use of filters and you can have a wax drawing on parchment or an oil painting on stone. It sounds like a great feature on paper, but in reality, it's not one for everyday use.

## Brush strokes

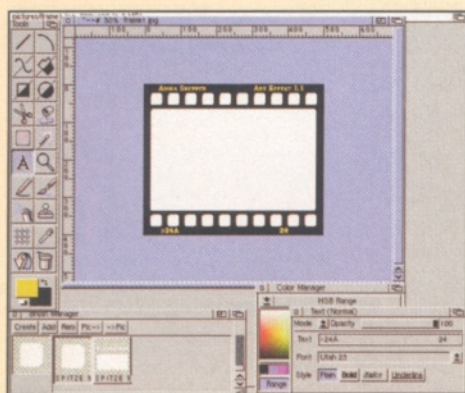
More useful by far is the control you have over brushes. This is one area of *Art Effect* that has been heavily developed. There is a Brush Manager which stores any brushes you have grabbed or created, if you have added them to the window.

In addition there is a Brush Creator, which enables you to edit round or square brushes to decide how many you want and the density of pixels within a brush. Although this gives you the chance to get exactly the type of line you want, it is a little overkill. As long as you have solid and feathered brushes, you can do pretty much anything and this level of control seems superfluous. Better than this is the type of brush and the controls for using a brush.

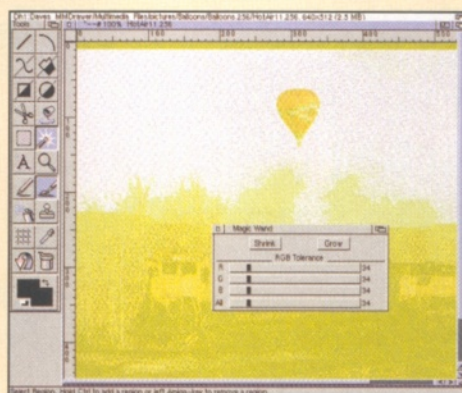
There are 15 types of brush – they are in a different dimension to a drawing tool (pencil, and so on) or a shape (circle, and so on) – including Impressionist, Smooth, Blur, Lighten and Darken which control how a stroke is applied. You can also set the opacity of the brush so that you can see through the brush to a varying degree, which enables you to produce ghost-like effects among others.

The brush can have a fade set so that if you use it to draw a line it will fade away from solid as you draw. Then there're pressure and steps, which determine how closely the brush will be written to the last one, so you can draw lines with the brush set equidistantly.

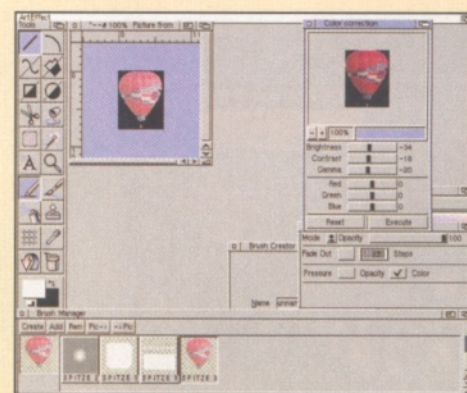
The effects and cutting can be made not only to the whole picture, but to separate sections. Sections can also be selected manually although, unfortunately, this only applies to rectangular sections. This is a pity



**4** Four separate frames were created, because the size of the documents meant that there wasn't enough memory to deal with more than one at once. Each one was given the same top line, but a separate frame number. When you apply text to a picture in *Art Effect*, you have to hit the space bar to fix it in place, which is a sort of minor take up on the object idea used widely in PC programs. But it isn't as flexible because it only works on the text you are working with and once fixed, it is set in stone. Yet it does enable you to place text where you think you want it and then zoom in or out and check how it looks.



**5** The first frame was designed to make use of the Magic Wand tool. This tool selects a whole section according to the colour clicked on. You can then grow the section by adjusting the tolerance which will take in more colour of the band you choose. The easiest way to do this was to select the sky and then use the Invert item so that the balloon was selected instead of the sky. The Cut tool could then be used to grab just the balloon as it will only pick up sections which are highlighted. This makes it a powerful way of grabbing brushes from pictures on multi-coloured backgrounds and placing them in other pictures.



**6** Before applying this new brush to the second picture some touching up was needed. A few parts were re-coloured and then the whole selection was adjusted with the Colour Correction filter. The second picture was significantly darker than the first, so before the brush could be added it was darkened down a bit so that it would appear more natural on the second image. The balloon was then picked back up ready to be put on the picture.



## The filters in full...



and would have been better applied to Circle and Freehand tools too because it is possible to use them when cutting out a brush.

When you've selected a section in either manner (a stencil), you can make some adjustments to the selection. You can remove or add colours to the section using the colour

selection feature (again, there is a tolerance level for similar colours), which shows a preview of the adjustments before you apply them. You can Grow, Shrink, Feather or Invert selections. Invert is essential because it enables you to choose a predominant colour shade, such as a background, and then invert it to get the object

in the foreground, rather than try to grab all the colours of a foreground object. Any stencils can be saved, so you can load them back in.

## Perfect palette

The palette control is extensive, also enabling you to mix colours in different ways from RGB



**7** The second picture was loaded and a balloon inserted, then the brush re-sized using the Scale tool. When placed, the result was satisfactory and any discrepancy was due to the quality of the images. The 24-bit editing meant the scaling feature was smooth. In most Amiga programs, a scaled brush appears pixelated and poorly aliased. But not here. However, the first choice for the second picture was a set of plane gun sights bearing down with the plane at an angle. The balloon fitted in, but it had to be rotated. Art Effect couldn't do this convincingly and the result was too pixelated to use.



**8** The first image was then grabbed as a brush, resized and placed into the first frame. The picture for the second frame was much easier to produce. It was simply to show off one of the best filters of the program, the Oil Paint filter. This transforms a photograph into a slightly impressionist oil painting. It works very well and looks convincingly like an original when the filter is added.



**9** The third frame was to use the artwork from the program – product recognition seems to be useful in these days of marketing! The picture was grabbed as a brush and the canvas size of the picture doubled vertically with the original picture kept at the top. The brush was then flipped and pasted in underneath the original to provide the mirror effect.





Using the Magic Wand, a Cut brush and a degree of opacity you can create fades like this.

to CMYK. Although you can choose colours in this way, you can't change a picture from RGB to CMYK (CMYK is the colour separation used in printing, where four plates are used).

Included in the program are all the standard features that you'd expect, such as cropping and re-sizing of brushes. You can load and save different filetypes although there isn't overly extensive support – IFF, BMP, JPEG, PCX, LNG and Targa. The pictures can be printed out through *Studio* or *TurboPrint*. All in all, *Art Effect* has an almost complete feature list.

### Third party plug-ins

The program does have one further element in its favour, which is its modular approach. Like *PhotoShop* and other PC programs, it will allow plug-ins to be developed by third parties (possibly Public Domain), which can then be dropped into the directory to add more features

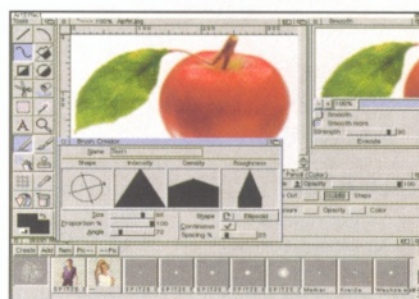
to the program instantly. This is likely to result in a lot more filters. While I'm not going to turn any down, it isn't the filter area of *Art Effect* that is its weak spot.

*Art Effect* is lacking one fundamental feature, which is the layers one used in PC programs. Some sort of layer or object method would have added immense power. Layers enable you to place brushes on to onion skin layers so they can be moved around later rather than just placed once, which gives you much more control and more ability to tweak images.

This feature would have added memory overheads certainly, but it is difficult for a program to be taken too seriously these days without it. It all comes down to the fact that Amigas are falling far behind in terms of power. A 16Mb Amiga is rare, but only if a large user base with this sort of power grows will programs like *Art Effect* be able to develop and compete.

In honesty, it's also missing direct scanner support, which other Amiga programs have, and which would add to it dramatically because, for example, you could scan images in directly for manipulation and tidying up, which is what the program is for.

For a more detailed look at some of the program's abilities, make sure you read the step-by-step guide to creating the cover image running along the bottom of this feature.



The Brush Creator is very powerful, but a bit too developed for everyday use. More focus should have been paid to other areas too.

### In conclusion

*Art Effect* is certainly a program to look out for. It did have a tendency to crash when it was low on memory, but I hope that this bug will be fixed quickly, along with the problem that it doesn't release RAM very well when a picture is closed. However, these factors didn't

stop *Art Effect* from being able to produce some excellent images and it's an accessible program that could possibly become my favourite Amiga paint package.

*Art Effect* is available as version 1.1 at the moment, but maybe more features will be available in a new version soon. If that were the case, it could knock the spots off all the other Amiga packages, but it would still have a long

way to go to beat the professional packages used on other platforms.

As it is, I prefer *Art Effect* to *Photogenics 2* because it is better thought out and more stable, but it doesn't stand as far ahead of the competition as I'd hoped.

### Art Effect 1.1

**Price:** £89.95

(£150 after 31/10/96)

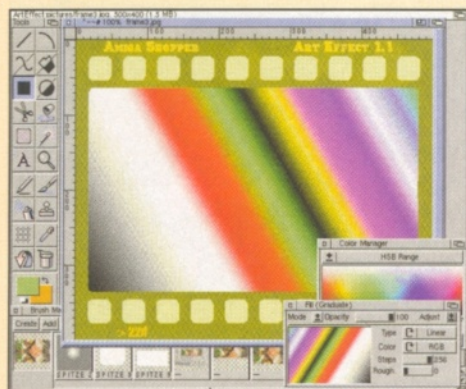
**Supplier:** Blittersoft

**Contact:** 01908 261466

**Verdict:** 90%



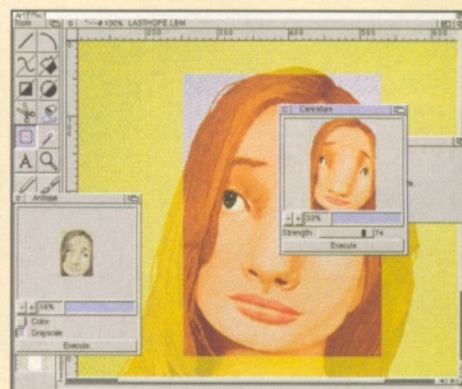
Star buy



**10** Rather than stretch the image to fit the frame, the white frame was filled in using the Fill Box brush. The brush mode was adjusted to the graduate method which fills the box with a rainbow effect, as you can see here. To make sure that the rectangle didn't go over the top of the bevelled edges of the frame, the Magic Wand tool was used again to select the white as an editable area. As with the Cut tool, you can select areas of a picture past which editing will not have an effect, so you can make sure any pasting gets cut off at that point. It's very useful indeed.



**11** The Art Effect brush was then pasted in, which was simplicity itself. The degree of opacity (transparency) of the brush was toyed with to show off one more of the features. This enables you to click a brush down which is semi-transparent, so that the background can be seen through it. In the end, though, it looked like overkill. It must be remembered that even if the package you're using is very powerful, overdoing effects will not be to your advantage.



**12** The last frame was used to show off a few more of the effects using the filters. The first was Caricature which takes whatever section you choose and applies what looks like a fisheye lens to it. There are differing degrees you can apply and the edges will be made to fit to the edges outside the selection so it appears more natural. The one disappointment with this effect is that you can't choose the centre of the effect and it is always in the centre of the selection.



## Art Effect's competition

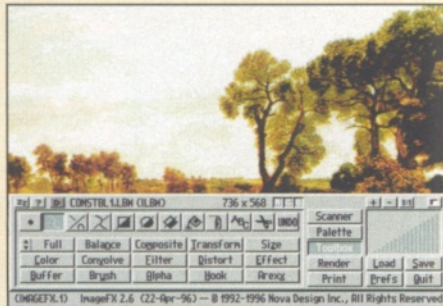
Here's a quick look at other programs similar to Art Effect, not only on the Amiga but also on other platforms. We haven't included Personal Paint, because although it can produce many of the effects, it is a paint package rather than an image manipulator.

### Image FX 2.6

Recently updated, this program is certainly powerful, but has a non-standard interface which can be tricky to navigate and off-putting to work with. It seems slower than Art Effect to add filters, but cannot really be faulted for features or results.

### Photogenics 2

This program really looks like an early release of Art Effect. It has all the ideas there, but sometimes operates badly. The effects are accessed through separate windows which is a sort of mid-way point between Art Department Pro and Art Effect. It does have support for virtual images, but Virtual Memory works out faster. It can also be unstable.



ImageFX 2.6 offers power, but is hard to use.

### PhotoShop

This is the big one. Popular for years and about to be released as version 4, PhotoShop is used by all the professionals and contains all the features that you'll ever need. Devastatingly expensive, it has layers, it has filters, it has bells and whistles. It can render clouds, rotate perfectly, add shadows – pretty much anything you want.

### PaintShop Pro

The closest PC program in terms of price. This program is released as Shareware with a professional upgrade and it is immensely popular. This is probably the closest to Art Effect and also doesn't use layers. It has many

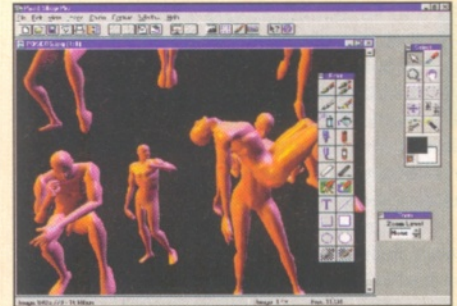


Photogenics 2 is good, but not very polished.



PhotoShop, soon to be in version 4, is the king.

filters and can convert pictures quickly between different-sized palettes thanks to a good dithering technique. The new version 4.1 has layers and offers advanced effects like drop shadows. It's easy to use and yet powerful and if Art Effect can match this program, then we will be getting somewhere.



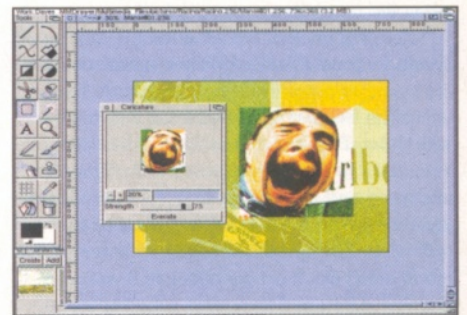
Paint Shop Pro is the level to aim for.



**13** The final filter – Antique – was then added to the frame. When all the pictures had been added to the frames, they were joined together using an extended canvas. This wasn't done originally because the memory usage was too high. Here Virtual Memory was used, which is slower, but works. The final image was saved out as a JPEG and moved to a Mac (because Amiga Shopper is produced on Macs) for the final changes. The rotation was made and the shadow created, although this could have been made in Art Effects using the frames, then blurring them and placing them in the background.



**14** Aside from showing you some of the many features of Art Effect, this walkthrough proves that it is a program capable of producing professional results. Any lessons learnt were that the majority of Amiga picture sources are made to be used at a much lower standard of dpi than is acceptable for professional work. When working at high resolutions, better images are needed, along with a lot of memory. This was produced on a 10Mb machine and more memory would have been invaluable. An 060 processor was used to make rendering times acceptable.



The Caricature filter can be used to add some very X-Files-type effects to pictures. You could even make a frame-by-frame animation. By applying it to a section of the picture, it is possible to get one aspect adjusted, but still fit with the rest of the picture.





# Directory Opus 5.5

The undisputed 'king of the file managers' is now on version 5.5. But what new features could possibly be added to this already powerful program? **Graeme Sandiford** finds out.

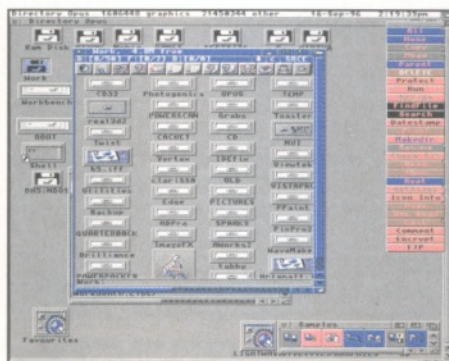
It is an established, if a little odd, fact that just about all technically-minded people are disorganised. I'll admit that I am hopeless in this regard and most other intensive computer users will admit it too, or have a few workmates or family members more than willing to point an accusatory finger at them.

This condition is not just limited to physical realms such as their desks, but is usually mirrored in the structure of their hard disks too. The trouble is that you can't do anything on your computer without generating files. It's a good thing too, or we might have to go back to storing work on punch cards or lose everything when the computer is switched off.

Keeping track of files and folders that are created on most Amigas daily is easier using a file manager program. Thankfully, the Amiga, unlike the PC and Mac, has been well blessed with them. The undisputed 'king of the file managers' is *Directory Opus*. When *Opus 5* appeared early this year it caused a stir among serious Amiga users. Admittedly, not all of the reactions were good and a few stick-in-the-muds didn't like it simply because it was so radically different. There were even reports of strange events occurring on machines in which it was installed, but most of these glitches were sorted out swiftly enough with version 5.11.

## New features

- Action mode
- Automatic right-button clicking on non-selected banks
- Enhanced Workbench
- Replacement mode
- Integrated FTP tools
- Borderless button banks
- Filetype-specific pop-up menus
- Cybergraphics
- RTG support
- Independent hotkeys
- User-definable scripts
- Improved custom menus
- Built-in font viewer



You could, if you were particularly brave, use **DOpus** to replace **Workbench** entirely.

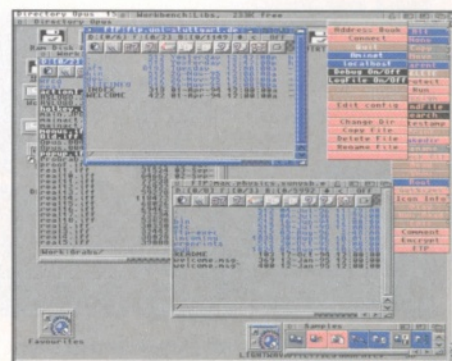
Since then, the program has gone from strength to strength and, as it has been for so many years, it is one of the Amiga's most popular programs. When version 5.5 was announced it was hard to imagine what new features could possibly be added – such was the program's arsenal of powerful and useful tools. But, apparently, there are some and *Opus 5.5* is being touted as a major upgrade.

## Starting up

Installation can take a long time if you select any option other than the Novice mode, even if you are only upgrading. This is mainly because there really is so much more on offer than the last version. Fortunately, this process, while time-consuming, is not overly complicated and there's plenty of help available on what the various choices you need to make will do.

The first thing you will notice about the program when you run it is the graphical differences between 5 and 5.5. One of the many extra options you can choose to have installed is a new set of MagicWb icons specifically designed for use within *Opus*. We think they are quite attractive and will be keeping them, but we can understand if some people find that their functions are even harder to discern from the previous version.

Even before the program is loaded you might notice a graphical difference – a hidden



FTP support has been added, so you can use **Opus** to easily transfer files on the Net.

boot-up picture option. When activated the program will display a picture each time it boots up and there're a couple of example pictures included, one of which is quite humorous – in an anti-PC sort of way.

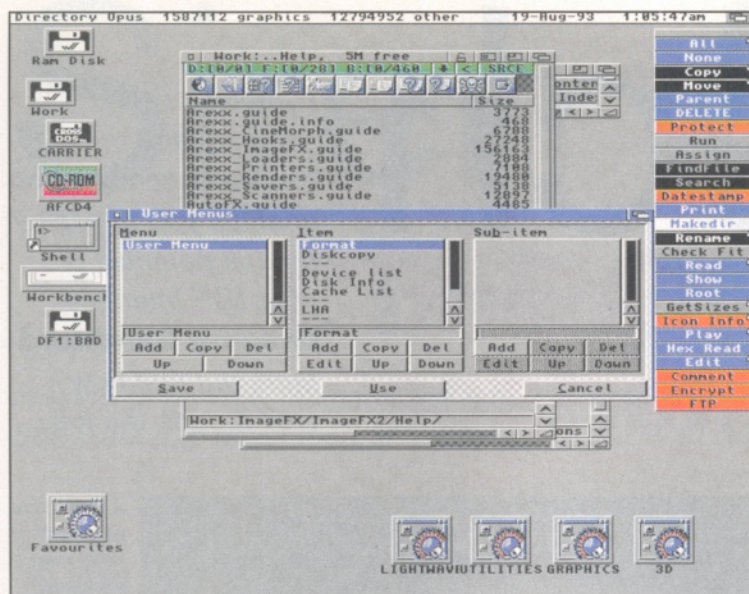
## Third party add-ons

There are several add-ons from third party developers that have been included. Not only does this show how popular *Directory Opus 5* is, but it also bodes well for further, and continual, development of its features. The majority of add-ons are in the form of ARexx scripts, which means that not only are they relatively easy to create, but they can also be used to communicate with many other serious Amiga programs.

The scripts included with program perform such tasks as executing various functions in your favourite packages, modifying archives, playing music modules, manipulating Listsers and their contents and sending ARexx commands. An excellent example of the sort of add-on files that are available for *Directory Opus* can be found on this month's Coverdisk – in the form of *Magnum Opus*.

One of the aspects of computing that is currently hardest to ignore (not that you should want to) is Internet connectivity. *Opus 5.5* has a special treat for those of us who are connected to the Internet – it has extensive FTP tools.





These make accessing Internet FTP sites, like the Aminet and many others, a heck of a lot easier because you don't have to fiddle around with hard-to-configure software, and learn a list of commands, to be able to navigate your way through a site or download a file. *Opus 5.5* treats FTP sites as if they were simply another drive and brings up a normal Lister for a site you have accessed. You can then move around the site using the standard methods such as double-clicking on a folder and you can also perform drag and drop operations.

Accessing this FTP feature is simple because there is a button set up for it in the default environment. Clicking on the FTP button will bring up a new list of buttons (another new feature) and these perform a variety of FTP functions. These include an address book, buttons for specific sites, FTP commands, change directories, copy files, delete files or rename them. A welcome new FTP-related feature is that you can have several Listers open simultaneously to different sites.

## Filetype feature

One of *Opus'* most powerful features, even in version 4, is its Filetypes. This brilliant tool enables you to specify certain types of files that the program will recognise and take a certain action. Practical uses for this are displaying pictures or listing archives. However, a lot of novice users may find defining filetypes too tricky. So, to make life easier, *Opus 5.5* has a file Sniffer tool. Whenever you double-click on a file that the program doesn't recognise you can

let the program get its 'scent' so that it can recognise other files like it. You can still do it the old way, but this means that beginners can start using this powerful feature straight away.

A similar feature that has been improved as well are the custom User menus. You can now create as many menus as you like and add sub-items as well as items. User menus appear at the top of the screen just like any others and provide yet another method of performing user-specified actions.

As well as the program's excellent Filetypes and User menu functions version 5.5 also has a Scripts Editor. This feature can be used to attach standard *Opus* functions to certain events rather than actions made on a file or a User selected command. For example, you can execute an *Opus* function each time a bad disk is inserted (like playing a sample), when a disk is removed, or when the program is launched or shut down. A good example given by the documentation is how to set up the Format command to run automatically when a bad disk is inserted.

Another tool that helps with the functionality of the program is the Hotkey Editor. As you might expect, this enables you to assign functions to various keys and key combinations. The process of setting up a hotkey is much the same as defining a Filetype because it will also bring up the Function Editor which can then be used to define an action or command to be made when a key is pressed. This can be anything including an internal *Opus* command, an ARexx script, a Workbench or AmigaDOS

*User menus, Listers and global hotkeys are now more flexible. We don't think much of the new icons, but you can revert to the old ones if you like.*

program. This is a great way to access often-used directories, execute favourite programs or to connect to your Internet Service Provider.

As well as their new Mwb-look, the Listers have undergone some non-cosmetic changes. They now have another view type, as well as being able to view a file's date, size and name, you can also view the version numbers of libraries so you can tell at a glance if you are going to replace a new library with an older one.

*Opus'* custom buttons have also been revamped and are sporting new options. Custom buttons are another method that *Opus* uses to provide easy access to its features. Basically, this means that you can assign an internal command, ARexx script or external program to a button that will act on the selected file. Now it is possible have button banks with the normal borders (ugly) or with just a drag bar for moving them around. More profoundly, there is a command to open a new button. This means you can have button banks within button banks which makes things much tidier and enables much more compact grouping of related buttons.

## Create add-ons

There are plenty of other enhancements and new features in version 5.5. For example, there is font viewing, Cybergfx support, pop-up menus that are Filetype specific, improved clipboard support, a new internal CLI environment and a new Icon Action mode which combines the graphical appearance of icons with the functionality of name Listers.

However, one of the most interesting changes is the inclusion of a Developer's Kit so that programmers can create their own *Opus* add-ons. This should help ensure the future development of the program will be in line with the needs of the users and anyone with a fair amount of programming skill will be able to create the tools they need.

*Opus 5.5* is a major step forward in file management programs, not just because of its new feature, but because of its improved reliability and documentation. If you use your Amiga seriously then there are no excuses – you must go and buy this product, immediately. ■

## DOpus 5.5

Price: £49.99

(upgrades: from v4, £39.99;  
from v5, £29.99)

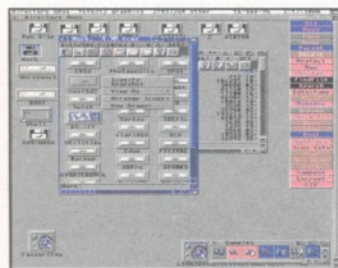
Supplier: Wizard Software

Contact: 01322 527800

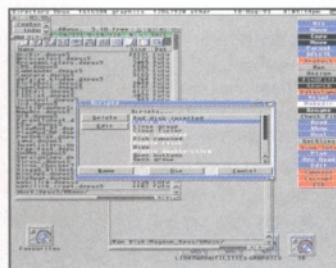
**Verdict: 95%**



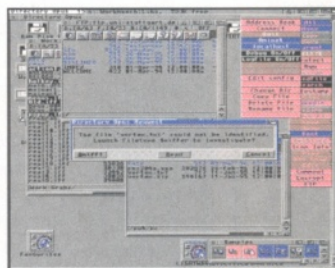
Star buy



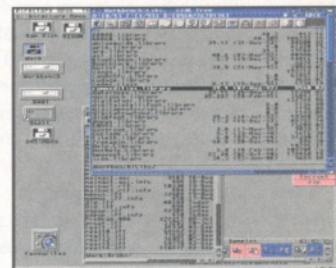
There are all sorts of bells and whistles which can be added – pop up menus anyone?



Now you can add scripts for system events like bad disks, Listers being closed and so on.



The new Sniffer system enables the user to quickly and easily set up new filetypes.



Listers can now display all sorts of file information, in a variety of different formats.



# Eyetech

## CDPlus and CD-ROM Interface

*Eyetech's new software and hardware combination enables you to exploit the full potential of your IDE interface.*  
**Graeme Sandiford**  
*finds out just how well it does the job...*

**I**t's quite amazing, when you think about it, that Commodore made such an effort to switch from SCSI to IDE hard disk controllers when it created the AGA Amigas. Yet over the last couple of years the majority of new interfaces and peripherals have been SCSI-based. While it is true that there are advantages using a SCSI interface, the fact that IDE peripherals are generally cheap and more widely available than their SCSI counterparts can't be overlooked.

Of course, the A1200 does come with an internal IDE interface, but that is usually taken up with an internal hard drive. And, because it is internal, you can't fit much else inside besides a hard drive. So far, the only product that has tried to take advantage of the A1200's internal IDE interface has been the SCSI-Flyer which, of course, is a SCSI interface.

Now Eyetech has a new software and hardware combination that enables you to exploit the full potential of your IDE interface – the CDPlus CD-ROM and Interface. The company has several different bundles and options on offer, including SyQuest EZ drives, Shuttle bay drives and different speed CD-ROM drives.

The key to this system is the interface which fits inside your machine and enables it to connect up to two IDE/Atapi devices. This interface connects directly to the IDE interface with one cable, to an existing 2.5-inch or 3.5-inch hard drive with another cable and the third to an external drive or drives. This is a potentially messy situation that hardware novices might well be wary of trying to tackle.

Of course, things could be made even worse if the instructions were poorly produced or ambiguous – not to mention dangerous. But thankfully Eyetech has done an excellent job of providing accurate well-illustrated instructions. Not only do the instructions take you through the installation step-by-step, they also highlight possible problem areas and tell you how to avoid them, making for almost fool-proof installation.

The installation process itself is straightforward and should only take about 10 minutes if you know what you are doing, and only a little longer if you are less experienced.

When fitted, the interface and its connected ribbons are tidy because the ribbon that connects to the external drive doesn't exit via



*A well made package with some excellent instructions.*

the blanking plate at the back-right of the case. Instead, the ribbon is attached so that it exits through the left hand side of the rear casing of your Amiga without the need to double the cable back on itself. Apparently, Eyetech has decided upon this method for three reasons – most people prefer to position their CD-ROM drives to the left of their Amiga, using the blanking plate necessitates the removal of the floppy drive and it is possible to run cable out of the back of the case.

However, this method does exert a bit of pressure on the ribbon and could, with excessive opening and closing of the case, damage the ribbon. Other than that, the interface is quite snug and happy tucked away just above the hard drive and is held in place by a Velcro strip.

There are two versions of the kit – one for 2.5-inch and one for 3.5-inch drives with different sets of instructions.

The CD-ROM drive supplied is fairly standard in appearance and comes in two speeds 4x and 8x. The casing in which the drive is mounted is a little large and measures 24.5 x 26.5 x 5.5cm. The rear of the casing has been modified to suit the IDE interface rather than having the wires stuffed clumsily into the case while leaving the SCSI connectors in place. As well as an IDE connector there is also a power throughput socket so that a second IDE device, like the optional EZ drive, can draw its power from the same casing.

Like most casings of its type, this one takes power from the mains via a standard power

lead. However, it's a little worryingly that if the power switch is not turned on the drive apparently attempts to draw some power from the IDE lead connected to the Amiga. This is particularly good, especially if you have several peripherals attached. But there is no indication that it attempts to draw power from the Amiga when it is switched on and it crashes the machine in the process.

The SyQuest EZ 135 drive that is available is essentially an internal version of the drive, fitted inside a customised external floppy drive casing. Not using the original casing means that the drive can share the power supply of the CD-ROM which means that there is one less plug socket to worry about.

Both the drive and the interface seem to be well manufactured and the fact that Eyetech has taken the time to remove the SCSI connectors is a sign that this is a quality product. The only problem we ran into is that the interface does not seem to like the Blizzard 1260 accelerator – with or without the SCSI kit. However, it worked fine with the 1230 card and SCSI unit. This is definitely a well-thought out and viable alternative to buying a SCSI CD-ROM drive or external storage device. ■

### Eyetech CDPlus

**Price:** £109.95 (EZ135), £149.95 (4x)  
 £199.95 (8x)

**Supplier:** Eyetech

**Contact:** 01642 713634

**Verdict:** 90%



# Siren Atapi

## CD-ROM Interface

In a bid to provide Amiga users with a way to enjoy the benefits of cheap IDE peripherals, Siren Soft-ware has developed an IDE/Atapi-based CD-ROM package. **Graeme Sandiford** gets connected.

**W**hen the Amiga 1200 was launched, one of the things that I remember most clearly was all the complaining and moaning about its lack of expandability. All the poor machine had was a single trapdoor expansion slot and its humble internal IDE interface – what was it going to do with those?

Yet over the years all of the developers and users had to eat their hats as more and more ingenious methods of expanding your A1200 appeared. First came the RAM cards, then the accelerators and then the SCSI cards for the accelerators. Who could forget the arrival of that most ingenious device – the Squirrel, a SCSI controller that attached itself to the PCMCIA port? These, and many other expansion options, have been made available to the A1200-owner over the years, but there has been one option that has been overlooked.

Almost all of the A1200 expansion interfaces have been based on SCSI technology. Of course, there's nothing wrong with this since SCSI technology has plenty of things going for it such as the ability to connect up to seven devices to the same interface, as well as possible uses with peripheral like scanners. However, if you are anything like me, how often have you come across cheap IDE/Atapi CD-ROM drives and other devices at computer fairs or seen incredibly cheap drives

advertised in PC magazines? SCSI is a great way to connect your peripherals, but it is comparatively expensive when compared with IDE devices.

In a bid to provide Amiga users with a way to enjoy the benefits of cheap IDE peripherals, Siren Software has developed a new CD-ROM package that is IDE/Atapi-based. It makes use of the Amiga's internal IDE connector to attach a CD-ROM drive while enabling your internal hard drive to function as normal.

To achieve this end Siren has created a similar 'widget' to that of Eyetech's (reviewed opposite). However, the two sets of instructions contrast strongly in terms of their thoroughness and clarity. Siren's sheet of hardware installation instructions tell you all you need to know to get the job done, but they lack helpful illustrations and in-depth guidelines like those supplied with Eyetech's interface. Having said that, this is relatively straightforward and if you can fit a hard drive you shouldn't have any problems.

If you have a 2.5-inch drive, then you need to connect only two ribbons – one that connects to the CD-ROM drive and another that has two connectors and attaches itself to the IDE interface and existing hard drive. If you have a 3.5-inch drive, then a third cable needs to be attached. Unlike Eyetech's drive, the cabling for this drive goes out through the blanking plate of the A1200 (that spare socket at the back of your Amiga). This means that you will have to remove the floppy drive in order to gain access

to the panel. The interface is fixed in place with a screw through the hole that is usually used by accelerator SCSI interfaces.

This is no big job in itself, but it means that the ribbons go from one side of the machine to the other which is a little untidy. The wider ramification of this is that if you already have an accelerator fitted with a SCSI unit then you will either have to try to run that interface outside the casing or the IDE one – not a great solution. However this may only affect a few people who may want both interfaces.

Physically, the interface doesn't inspire much confidence because it looks hastily assembled and has bits chopped out or filed down. However, despite its untidiness, the interface seems relatively sturdy and shouldn't come under too much stress anyway. Along with the Eyetech interface, it shares a dislike of the Blizzard 1260.

Moving on to the drive, it is a standard 4x speed, and is quite compact, measuring 15.5 x 28.5 x 5cm, and quite sturdy. It has all the usual controls and connections including a headphone socket, novel volume buttons rather than a dial, phono sockets and SCSI connectors! To make matters worse, the useless SCSI connectors are positioned just below where the IDE ribbon is stuffed inside the casing. This gives the drive a rushed and improvised look and again gives me some cause for concern.

The Software supplied is the same as Eyetech drive's – IDE Fix. Aside from providing the software necessary to use the CD drive, the disk contains an audio CD player, a CD file system and CD<sup>32</sup> emulation software. The instructions for the software are actually more in-depth than those for the hardware installation and include helpful tips on how to get CD<sup>32</sup> games to work correctly.

As a total package the drive performs well enough and is reasonably priced. But there are some lingering doubts about the quality of the drive and interface and how reliable they might be, over a prolonged period of use. ■

### Siren Atapi CD-ROM

**Price:** £169.99 (4x), £239.99 (8x)

**Supplier:** Siren Software

**Contact:** 0161 796 5279

**Verdict:** 73%

*Performance seems to be satisfactory but the package looks rushed.*





# OctaMED

## Sound Studio

Not just an enhanced version of OctaMED, Sound Studio has some stunning new features. An excited **Paul Overaa** puts the latest offering from Teijo Kinnunen and RBF Software through it's paces.

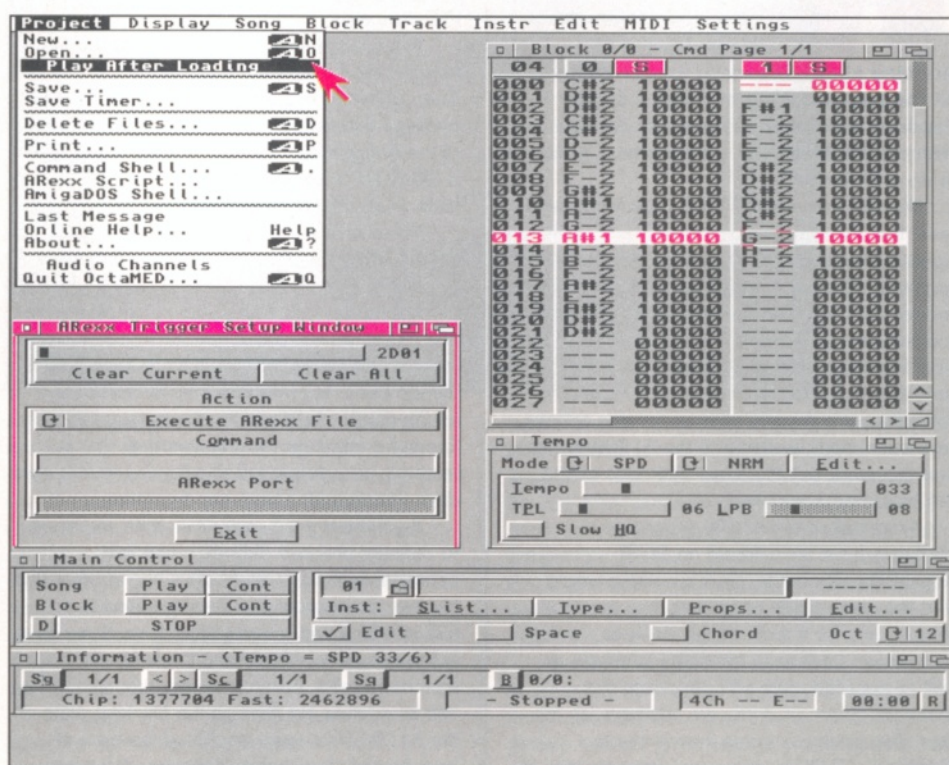
**T**he Amiga's music scene has been a little the worse for wear for some time, but it has – as most of you will already know – received a substantial boost of late with the appearance of the new OctaMED Sound Studio.

Needless to say the package has its roots in previous versions of OctaMED, but the Sound Studio is not simply an enhanced version of OctaMED as such. Underneath the surface some dramatic changes have occurred with perhaps the most exciting feature being the new digital mixing facilities. A new Mix Mode actually allows up to 64 notes to be played at once, although sound quality will suffer unless you have a fair bit of processing power available.

One good thing about the latest Sound Studio arrangements is that they are both hardware independent and flexible. You can push the Sound Studio output through to the Amiga's internal sound chips or to a sound card (already several boards are supported including the 16-bit Toccata, Maestix and Delfina), but the really exciting thing with the new package is that you can also 'play' a tracker module (or part of it) to disk in either 8-bit or 16-bit form.

This latter facility is probably the most important addition that has ever been provided with any tracker program and it has a number of potential uses. Short drum blocks consisting of maybe a dozen drum samples can, for example, be created and then mixed down to a composite sample lasting for a couple of bars or so. Once that's available you can, by looping, use that single sample as the basis of a drum track for a complete song. This way of generating multi-instrument loop-able samples, of whatever are considered the less important tracks, helps keep the remaining channels free for those instruments handling the main melody.

Best of all these digital mixing options are dead easy to use. You just select the 1-64 channel mixing mode from the Song Options menu and choose either 8-bit or 16-bit disk output in the Settings menu Mixing Settings requester. Sound Studio displays a requester to enable you to choose a location and name for the new file and, as it 'plays' the block it generates the equivalent sample. You can, of



People who are familiar with using OctaMED will have no trouble at all getting to grips with the new Sound Studio package.

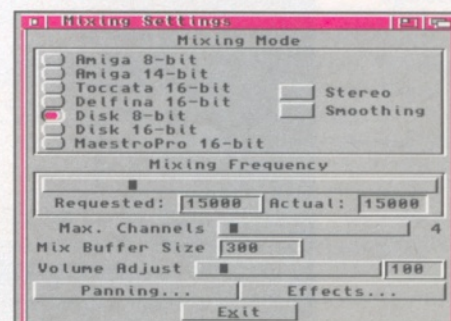
course, do the same with overlaid vocal 'oohs & aahs', bass riffs, or anything else where having a repeatable loop could save sample space.

A special Smoothing switch, incidentally, is available now when digitally recording to disk and, by filtering out unwanted frequencies, is able to improve overall audio quality. The digital arrangements have also led to other benefits as well, with effects like Cross Echo now available.

### Sample Editing

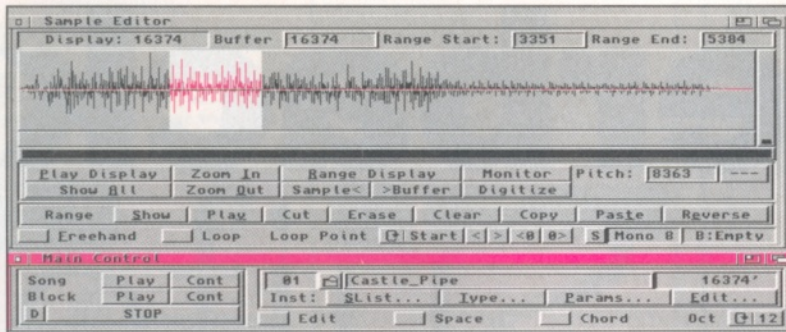
Sample editing is another area where changes have been made. Samples can be loaded or stored in a number of formats (including 8SVX, 16-bit Audio IFF and PC WAVE format files) and, as with previous OctaMEDs, you can also load and save raw sample data. To help when

transferring raw samples to and from PC machines there are also some signed/unsigned and byte swapping options available.

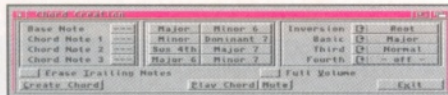


Being able to send the digitally mixed output to disk is extremely useful.





The Sound Studio's sample editor can handle 8SVX, AIFF, MAUD, WAV and RAW sample formats and do all the tricky PC/Amiga byte swapping stuff as well!



Creating two to four note chords with just a single note is very simple.

One sample editor option that is proving very handy is chord creation. Sound Studio can take a single note sample and from it create chords of between two and four notes. There are a good collection of presets available (including major, minor, suspended 4ths, minor 7ths and so on) but it's also possible to control the chord inversion used and, additionally, sharpen or flatten individual notes. So if, for instance, you're into modern jazz and need to create more exotic chords, major 9th or 13th chords with flattened 5ths and so on, then it's easy to do it with Sound Studio!

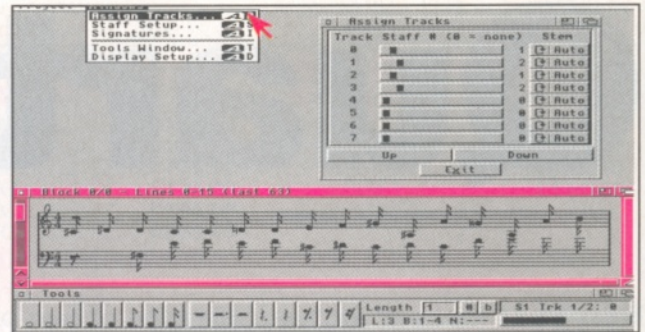
## And There's More

It's not just the new digital mixing arrangements that are worthy of making note of. A notation editor is now back and, although by no means brilliant (even in its new enhanced form), it does offer an alternative way of displaying and entering notes. There's an improved ARexx interface including an easy-to-use command trigger configuration window and, in four-channel mode, samples can be loaded into Fast RAM and transparently moved into chip memory as required.

For the few users who have two Amigas there is a Slave Mode that allows the second Amiga's other four sound channels to be used to provide eight channel output. Other changes include a song annotation window for attaching copyright notices and the like to your songs.

The AmigaGuide help arrangements have also been improved, although I had trouble with these at first. Somehow during the hard disk installation process (which I was performing in 'expert' mode) I managed to overwrite my copy of the AmigaGuide library with an older version. This messed up the help system for a while although, once I'd discovered what was wrong and replaced my original AmigaGuide library file, everything was fine.

OctaMED generated SynthSounds, along with an enhanced SynthSound editor, are still catered for. These, to my mind, have always been a poor substitute for real sampled sounds but they do have the advantage of requiring very little memory.



The notation editor - not a patch on the facilities found on either the Mac, PC or ST/Falcon - but sufficient to get the job done.

## The Sound Studio: a little history

Tracking is one of the most established of the Amiga's music areas simply because, right from the days of the A1000, games programmers needed a fast, convenient way of creating music for demos and games. One early utility was called SoundTracker and shortly after this arrived other clones appeared.

Being essentially programmers tools these tracker utilities used programmer-style conventions for sequence creation. Note information was built around crude lists showing the times at which various samples should be played. Editing options were less than perfect but, despite all this, the underlying tracker method of composing proved good enough to become the defacto standard for

creating Amiga internal sound based music!

It was during these early days that Teijo Kinnunen produced a Public Domain tracker called MED. Within a few years MED had gone from strength to strength and, eventually, an eight channel commercial version, OctaMED, was released. Then came OctaMED Professional and by the time version 6 of this package had appeared the program's facilities, which by then included various Midi options, had grown enough for OctaMED Pro to be beating the competition hands down.

But early in '95 development work had started on the all-encompassing Sound Studio package and it's now clear that this latest offering just ain't ever gonna be beat!

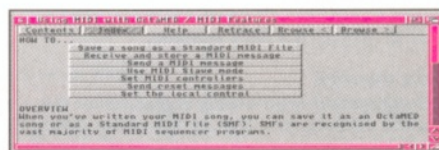
On the MIDI front one or two improvements can be found including a new window that makes it easier to set MIDI controllers. There are many other, perhaps less important, areas where changes have occurred as well including the addition of a window which allows you to do search-and-replace operations on notes, instrument numbers and commands. There's even a menu item for opening AmigaDOS shells on the OctaMED screen for quick command line jobs and basically the list of improvements at this level just goes on and on!

## CD Extras

The CD version contains a fair amount of material not provided with the floppy release. One notable exception for programmers wanting to add Sound Studio player facilities to their own programs is that the header files, libraries, and so on, are no longer provided with the floppy version. It's purely a space problem and coders can get these files from either any Aminet mirror or from RBF Software.

## The Bottom Line

A lot of work has gone into the Sound Studio and it shows - it really is a joy to use. The exact



The on-line AmigaGuide help now covers pretty much everything you'll ever need to know.

performance you get depends on what Amiga you have, whether you have an accelerator and so on, but there's no doubt that even on a basic A1200 the chance of you not being impressed is remote.

Everyone has, quite rightly, been raving about Sound Studio's use as a tracker program, but it's probably worth investing in the Sound Studio even if you're not into tracking as such - even from the sound sample editing viewpoint this package offers facilities that are way beyond anything that even the best sample editors of a few years ago (*Audio Engineer* for example) could manage. In short - it is the best music-tracker/sample-editor workstation that has ever appeared, or in fact is ever likely to appear, on the Amiga! ■



## OctaMED Sound Studio

<b>Price:</b>	There are discounts for existing OctaMED users, MUG (MED User Group) members, and variations in price for UK, EC and rest of world purchasers. These are the basic UK prices:
<b>Floppy disk version:</b>	
New Users	£70
Registered	
OctaMED V6 users	£35
<b>CD Version:</b>	
New Users	£35
Registered	
OctaMED V6 users	£25

**Supplier:** RBF Software

**Contact:** 01703 785680

**Verdict: 96%**



# Quarterback Suite

**Ben Vost** looks at the reappearance of two old favourites bundled together in a new low-price package from Quasar.

**Q**uarterback and Quarterback Tools hardly need explaining. If you're one of those Amiga users that has been around since 1987, you'll have seen the first versions of Quarterback and in the nine years since then, the program has improved slowly and steadily.

The reason we are writing about these two veterans in the file management war is that Quasar Distribution, the current owners of the programs, have decided to relaunch the pair in a

## Quarterback Suite

**Price:** £34.99

**Supplier:** Wizard Developments

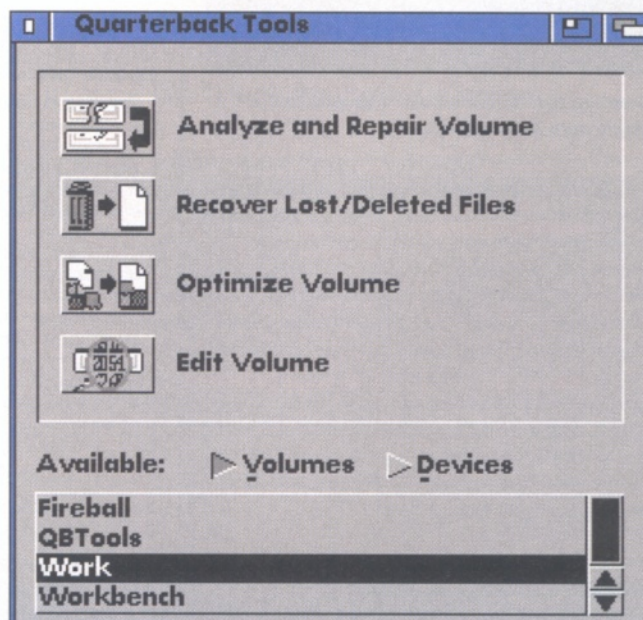
**Contact:** 01322 527810

**Verdict:** 85%

low-cost bundle which is ideally suited for even the most humble systems since most, if not all the programs, run even under Kickstart 1.3.

There's not really much more to say, the boxout at the bottom is there in case you really don't know what comes in the bundle, the price is good, the programs are solid performers (apart from the annoyingly slow and non-standard user interface). Definitely a must buy if you have a hard drive. ■

*Quarterback tools is ideal for finding those files that you may have accidentally deleted.*



## Quarterback Suite consists of the following:

### QUARTERBACK 6.1

The Amiga's longest running backup program. This version gives added support for Multi-user File System and ups the limits on the number of floppy disks that can be used for a single backup to 6400 (although by this stage I would really recommend a tape streamer).

### SCHEDULEPRO

SchedulePro is a task scheduler that can be used for Quarterback or Quarterback Tools, but also for any program that you might wish to run at a particular time, for instance getting online to retrieve your mail.

### QUARTERBACK TOOLS 2.0

A program to help you find and correct disk errors, recover files that have been accidentally deleted, and optimise your disk access. In addition, for advanced users, Quarterback Tools includes a disk editor, which lets you directly examine and modify the information contained on your disks. Quarterback Tools also includes a macro capability, a complete ARexx port for advanced users, and is completely customisable to your way of working.

### REPLICATOR

A program to quickly and easily duplicate a large number of floppy disks. You can duplicate to multiple floppy drives at the same time, and even save an entire disk image as a file on your hard disk to use later.

### LOCATOR

A program that helps you quickly locate files on your disks. You simply provide any part of a file name, and Locator will search the entire disk (or just a sub-directory of the disk) and find all files that match that name. For each file found, Locator can tell you the location of the file, information about the file, and show you a portion of the file's contents.

### ENCRYPTOR

A program to encrypt and decrypt files. You can use this program to keep others from seeing the contents of your files; only those people who have the file's password will be able to decrypt and use the file.

### FILE ERASER

A program that irretrievably erases a file's contents, and then deletes the file. File Eraser includes an option to erase a file using the US Department of Defense approved method for permanently erasing files. You can use this program to permanently remove sensitive information from your disk; no file recovery program, not even Quarterback Tools, will be able to recover the file's contents.

### DISK ERASER

A program that irretrievably erases either the unused portions of a disk, or the entire disk itself. Like File Eraser, Disk Eraser includes an option to erase a file using the US Department

of Defense approved method. You can use this to permanently erase files which you have already deleted, or to erase all files from a disk.

### KEYSTROKE FINDER

A program that shows you the appropriate keystroke combination to type any character on your Amiga. For example, Keystroke Finder can show you how to type accented characters like % and Å, and special characters like ©. Keystroke Finder works with any keyboard and "keymap" setting.

### SYSTEM MOVER

A program that simplifies moving system files – such as fonts, printer drivers, and system libraries – from one disk to another. System Mover can show you the version number and information about the files it's moving so you can be sure you are using the latest versions of your system software. Also, when moving fonts, System Mover automatically updates all of the appropriate font information files, and even automatically moves "metric" files, which are necessary for programs that use PostScript printers.

### BRAIN CLOUD

A program that renders a floppy disk temporarily unusable by the system, without affecting any of the disk's contents. A disk that has a "brain cloud" cannot even be formatted by the Amiga.



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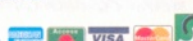


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# Cyberstorm Mark 2

German developers Phase Five return to big Amigas with the Cyberstorm Mark 2, carefully tested by **Simon Goodwin**.

**P**hase Five made the first 68060 accelerator for the Amiga. The new model is upgraded, cost-reduced and slimmed down to fit A3000 and Tower Amigas as well as desktop A4000s. The basic specification is unchanged: 68040 or 68060 processor, four good-quality SIMM slots, and a custom SCSI adaptor socket.

Phase Five no longer have the market to themselves, with rival boards from GVP and Apollo. Prices are lower, but how else do they respond to the challenge?

The Cyberstorm system has three main parts: processor, memory and SCSI adaptor. The 68060 is the ultimate in the 68000 line from the first Amigas. It runs the same instructions, but typically 50 to 200 times faster.

## Plug and play

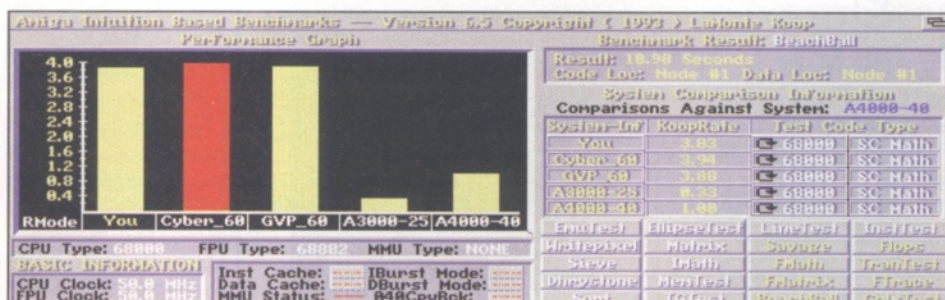
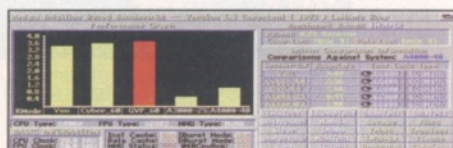
For the first time I can remember on a CPU card, this board has no configuration jumpers. You can plug any size of SIMM from 4Mb to 32Mb into any one of the four sockets, and they all merge into one block.

Freedom to plug any size in anywhere saves time when re-configuring. There's no need to shuffle the largest SIMM to a priority socket, as on older boards, and no risk of holes appearing in the memory map, preventing you from dedicating all your fast memory to one task.

Motherboard memory, appears at the usual addresses, just before the faster CPU card memory; these are not normally merged, even though they end up contiguous.

The Amiga sensibly gives the fastest memory priority; it only uses motherboard 'fast' memory when that runs out, preventing the merging of the two.

The table compares the relative speed of memory on current 50MHz 68060 accelerators with Commodore's own processor cards for A3000 and A4000. It shows the efficiency of communication between processor cards and the motherboard, as well as the speed advantage of 'local' fast memory.



The Cyberstorm slightly out-performs my current set-up for the beachball test.

Phase Five can write to chip memory much faster than other 040 or 060 boards, but their 'fast' memory is not as quick as that on rival boards from GVP and Apollo. Upgrade to a 68060 from an earlier chip and the sheer speed of the processor outweighs these factors, but they're worth bearing in mind when comparing 68060 implementations.

This is the first 68060 board I've tested which lacked a cooling fan. There's no heatsink at all and the chip gets hot to the touch, although still not as hot as a typical 68040 with a heatsink. Carsten Schlote of Phase Five Technical support told me he'd be happier if a simple passive heatsink was included, but in practice thermal problems have not been found.

## Documentation

The Cyberstorm package includes two manuals, each about 40 pages long - the first half is in German followed by a clumsy translation.

The manuals are adequate, but skimp on software details. There's not much to say about the main board - it's easy to fit and needs no configuration. Most of the SCSI manual deals with upgrading and things like cable termination.

The documentation promises an appendix with advice for A3000 Workbench 2 users, but this does not appear. Craig Lewis at Harwood's confirms that Kickstart 3 is required.

A replacement Appendix says the Cyberstorm Mark 2 should work with faster 68060s, but the upgrade kit is not yet available. In fact new chips should be out by the time you read this: 66MHz Cyberstorms are projected to sell at around £650.

## Installation

Phase Five's installation script renames Commodore's 68040 library and replaces it with a short stub which checks the processor type and loads either the original or the 68060 version, depending on the chip it finds. It also copies a set of 68060-specific utilities to your hard drive.

The new library checks for the processor in use, so you can revert to the Commodore 68030 or 68040 boards for comparison purposes, and everything still works. That said, CPU-swapping is something to be avoided unless absolutely necessary, because it's easy to end up with a dormant or erratic system if you

## Phase Five answer back...

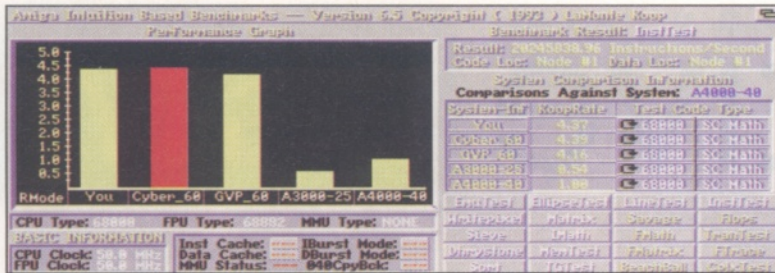
We queried the speed and temperature of the Cyberstorm with Wolf Dietrich, boss of Phase Five. This was his response:

"The memory has been designed to work flawlessly under all conditions, especially in cases where interactions with and tolerances of other add-ons, mainly the SIMMs themselves, influence the stability. As a matter of fact, we have found that many low-quality memory products are on sale, which do not meet the specifications they are supposed to meet. Therefore, we decided to make the design secure instead of squeezing the last 15% memory speed out of the design; we

believe it's better to do without these and prevent the user from troubles in case he has bought SIMMs which are not the best quality.

"The 68060 is specified to operate at 70 degree C surface temperature, which would be so hot that you couldn't touch it at all. The 3.3 V design consumes less power, and the heat dissipation is low. As a matter of fact, the temperature of the 68060 stays significantly below the specified 70 degrees without a heat sink, so it was not considered to be necessary. From about the 4,000 68060 boards which we sold without heat sink we never received any claims that temperature failures did occur."





This shows the Mark 2 is a bit faster than GVP on another AIBB test.

fail to fit the 200-pin connector snugly.

You must also check the settings of the CPU clock jumpers. These vary depending on whether the processor card has its own clock or takes over motherboard timings, like the minimalist Commodore 4000/030 card.

The new installation disk is bootable, so you can install the 68060 support after fitting the new board. This is an advantage over Mark 1, where you had to install the software first, before removing your old processor card. A second disk holds two 68060-aware assemblers from Aminet.

The 68060 library implements some 68K instructions not directly handled by the latest silicon. Phase Five supplement this with CyberPatcher and CyberSnooper, which replace instructions that need special treatment with 68060-friendly code, for extra speed.

## SCSI adaptor

The optional SCSI adaptor fits a socket at the end of the CyberStorm, extending upside down under the A4000's rear drive bay. This makes it a tight fit, particularly when you need to get cables from the board to internal drives.

Cable routine is tricky, as two 50-way SCSI leads and the original floppy and IDE cables all vie for space at the back of the Amiga.

The board uses the FAS216 processor, standard for Phase Five since the Fastlane Zorro 3 card, but it is much simpler than its predecessors. The new SCSI firmware shares space in one of the chips on the processor card. It now supports SCSI-direct and similar Commodore standards.

To bring the SCSI adaptor to life you skip the normal system startup and run a special program from the shell. This is dangerous – if it goes wrong you might have to send it all back to Phase Five for repair. A lone jumper near the processor must be re-positioned before you can update the firmware, protecting it from virus writers.

You must open your machine twice to toggle the jumper, so this 'flash' upgrade is arguably more trouble than a simple ROM change. The advantage – for Phase Five – is that future software can be supplied on cheap disks, rather than expensive, mechanically troublesome chips.

A third 880K disk accompanies the CyberSCSI board. This holds the vital Flash upgrader, utilities similar to Commodore's HDToolbox with options for fine-tuning the SCSI bus, and some inessential firmware: DynamiCache and CDrive.

These makeweights are not even the best disk accelerators or CD ROM handlers in the

PD. Both have faults; you won't miss them.

## Performance

CyberSCSI is quick and transparent. It implements the full SCSI 2 FAST protocol at up to 10Mb per second. I got 4.1Mb per second, testing it with a couple of cheap IBM drives. It also worked faultlessly with my external Toshiba CD-ROM drive.

The SCSI chip communicates directly with Cyberstorm memory, slugging the rest of the system much less than any Zorro or polled interface. DMA overhead ranged from 13 per cent, moving two hundred-odd 16K blocks per second, to under three percent when reading big 256K blocks at top speed.

MemTest results speak for themselves, but they only test one dimension of the system. Phase Five have upgraded to the new Motorola Floating Point Support Package, improving 68882 emulation speeds. AIBB -c1 -f2 fools that benchmark into running on the 68060, and turns in very similar results to other 68060 boards – within a few per cent of GVP either way, and two to five times the speed of Commodore's 3640 board.

Very few programs refuse to work on the 68060 yet run on the 68040. Most irritating is file name completion option in KingCon, which can lock up the machine on all the 68060 cards I've tried. Hisoft's Monam 3 still crashes on any 68060. I also ran into problems with SpeakEasy, which reads out requesters via the obsolete SPEAK device, but the majority of my programs worked fine.

The 68060 memory management unit is not quite compatible with earlier models, so currently Enforcer and virtual memory will not work. Supplied tools will copy kickstart files or ROMs to fast memory, and Phase Five include CyberGuard, a replacement for Enforcer.

Hardware compatibility is good – the quirky A4091 SCSI controller worked fine with the Mark 2 Cyberstorm, whereas it upset the Mark 1 and my Commodore 68040 board. The Cyberstorm supports multiple transfer cycles over Zorro 3, like GVP but unlike Commodore 68040s; this boosts the transfer speed for disk and graphic data blocks.

## Memory Speeds

50 MHz Cyberstorm Mark 1 & 2, GVP 68060 and Commodore 25 MHz A3000, A4000/030 and A4000/040 systems compared.

Memory Tests	Mk 2	Mk 1	C=040	C=030	GVP-060	A3000
fast readw	35.7	42.6	12.8	8.2	42.4	8.2
fast readl	43.8	55.0	13.2	12.1	56.9	12.1
fast readm	45.7	55.2	13.2	13.1	56.5	13.1
fast writew	31.3	37.6	5.5	8.3	42.1	8.1
fast writel	32.4	40.2	11.0	16.1	48.3	16.2
fast writem	31.3	38.4	11.0	17.8	30.6	17.8
chip readw	2.0	1.9	1.9	1.9	1.9	2.3
chip readl	3.9	3.8	3.8	3.8	3.8	4.5
chip readm	3.9	3.8	3.8	6.0	3.8	6.1
chip writew	3.5	3.5	1.9	3.5	1.9	3.5
chip writel	6.9	7.0	3.8	7.0	3.8	7.0
chip writem	6.9	7.0	3.8	6.9	3.8	7.0
rom readw	17.8	18.1	3.7	7.9	17.5	8.1
rom readl	19.1	20.2	7.5	10.5	19.3	12.0
rom readm	19.5	20.2	7.5	11.7	19.2	13.1
fastrom readw	37.2	N/A	4.0	N/A	44.1	8.2
fastrom readl	45.8	N/A	8.0	N/A	57.3	12.1
fastrom readm	46.2	N/A	8.0	N/A	53.5	13.1
MB fast readw	16.5	8.2	12.7	8.1	17.2	8.2
MB fast readl	19.1	16.4	12.7	12.2	18.9	12.1
MB fast readm	19.0	16.4	13.0	13.0	19.0	13.1
MB fast writew	11.0	9.8	7.0	8.3	10.5	8.1
MB fast writel	11.3	19.6	6.9	16.1	10.7	16.2
MB fast writem	11.1	19.6	7.0	17.5	10.5	17.8

### NOTES:

1. Tests performed with bustest 0.07 by Michael Van Elst from Aminet.
2. Timings are approximate and can vary by a few per cent in practice.
3. Cyberstorm Mark 1 and A4000/030 do not support ROM remapping.
4. MB fast refers to the Amiga motherboard 'fast' (\$07xxxxx) memory.
5. Top speeds for A500/600 fast memory are around 3 Mb per second.

## Overall

So, is this the fastest Amiga money can buy? Cyber utilities help, but the right sort of Apollo and GVP cards are quicker at accessing fast memory, and GVP's built-in SCSI controller is slightly more refined. But the gaps are small; most of the time you won't notice the difference.

What you will see with the Cyberstorm Mark 2, if you use AGA graphics, is much faster writing to chip memory, you'll also benefit from the ease of configuration – it now fits the A3000 and Tower Amigas too.

If your existing Amiga seems slow, a 68060 is definitely the way to go, and Phase Five's new board puts them back among front-runners in the real Power Amiga stakes. 68040 owners will not be disappointed, about as great as the step from Commodore's 68030 to a 3640. If you currently run a 68030, Cyberstorm performance will take your breath away. ■

## Cyberstorm Mark 2

**Prices:** CPU Board: £579.95

SCSI adapter: £89.95

**Supplier:** Gordon Harwood Computing

**Contact:** 01773 836781

**Verdict: 92%**



# Interactive epic

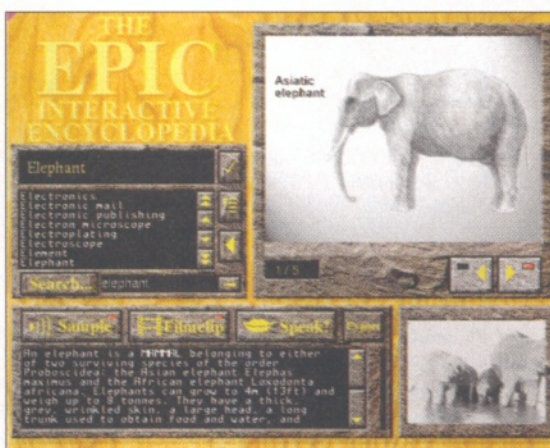
Ben Vost takes a look at the Amiga's answer to Encarta

**E**pic have done something quite different with their new CD – the Epic Interactive Encyclopedia. Rather than simply buying an already digitised encyclopedia from Pears, Collins or Britannica, they've decided to collaborate and, over a period of time, create a large body of work as comprehensive as any you might buy from a bookshop. But, with one important difference – if you want to contribute to it then you may.

When most people pick up an encyclopedia, the first thing they do is look up something they already know about and check their knowledge against what the book says. If you do the same with the Epic Interactive Encyclopedia and you find the information comes up short, or is missing altogether, then all you need to do is use the provided tool to create your own entry.

If your favoured topic is Orson Welles, for example, then perhaps you might consider including a short clip from one of his films and/or a sample of him reading out his War of the Worlds broadcast (but watch out for copyright problems of course).

In this respect, the Epic Interactive Encyclopedia is a joy to use. The Creator (the tool you will use to add your own subjects) is easy to use – all you need do is provide the text and any multimedia elements it may need and the program arranges it all in the appropriate manner. The version I tested, which comes on v1.0 of the CD is actually a v.94 beta version, but since I also received a disk with the review



The entry for elephant is unusual in that it has a clip and sample as well as several pictures – most entries don't.

copy with some changes to the main program (although not the Creator itself), I don't believe that the few crashes I experienced will be a problem for long.

But what about the program itself? How good an encyclopedia is it? On that score I'm not convinced that the Epic Interactive Encyclopedia can be used fully right out of the box. There are a lot of topics on which there is no information at the present time, but I'm sure that will change swiftly. The information there is tends to be fairly skimpy, usually with no more than forty or fifty words for an entry and too few cross-references for my liking.

Interestingly enough, all the data contained within the encyclopedia is actually freely distributable so that you can take the images, sound samples and animations and use them in your own productions. This makes the Epic

Interactive Encyclopedia potentially very useful for people who might need images or sounds of something in particular. Even so, you have to hope that Epic get absolutely swamped with offers of data, perhaps on the topics I mentioned, because if they don't then the project will suffer as a result.

Fortunately, as we all know, Amiga owners are notoriously voluble on subjects that interest them, and, among computer users that I know, the most generous with their knowledge and data, so Epic are in with a fighting chance.

Lastly, I hope the authors will revise the installer script when they next press the disc since I object to being informed that the version of the library I am about to have installed is newer than the one

on my hard drive without being told what exactly that library is.

Overall though, the Epic Interactive Encyclopedia is a bold attempt at a new sort of software for the Amiga – contributionware (or perhaps you might prefer collaborationware). Even if it isn't quite as comprehensive as I would like right now, I have no doubt that by the time Epic sends us version 2 (which will, no doubt, come on two or maybe even four CDs), almost any topic you care to think of will be included. ■

## Epic Interactive Encyclopedia

Price: £29.99

Supplier: Epic Marketing

Contact: 01793 490988

Verdict: 80%



The six media shows give you a potted history of the subject with voiceovers and pictures.

## Your specialised topic is...

Here are some of the topics that I would like to see included in the program:

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- Computers (the Amiga doesn't even get an entry)
- Named wars in history (Crimean, Seven Days, etc.)
- Elements (with a periodic table for easy access)
- Significant inventions (television, x-ray, etc.)

Epic also say they would be interested in doing specialist subject encyclopedias on more restricted topics, so in that case it would be nice to see:

- A "Jones" kind of thing (about military vehicles, etc)
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## PERSONAL

● **A1200 owning pensioner** with graphics and *WordPro* interests would like English-speaking penpals. All letters answered. John Teece, 51 Pine Hall Drive, Monk Bretton, Barnsley S71 2NS.

## FANZINES

● **The Big Squeeze BBS**. On-line 8pm till 6pm weekdays, 24 hours weekends. Speeds up to 28K, latest Aminet CD on-line, over 3,000 files on-line, FidoNet, running *Xenolink Pro* software. Call ☎ 01563 532882. ■



# Amiga answers

## IDE Fixed



it be more efficient to go for a SCSI drive?

Just wondering if it's possible to connect a CD-Rom drive (IDE) to my IDE port as well as my hard-drive. Do I need anything other than an extension lead? Or would

**Aled Hughes**  
Cardiff

Well, we answered this question last month and it's amazing what can happen in that time. Although last month the IDE "fixing" drives existed, we had yet to see one that worked. From all the information we'd seen, one of them was no more than a SCSI converter. Could we have been any more wrong? Well, possibly, but not by much. Since then we've seen two drives, which both use IDEFix software and a custom bit of hardware to allow more than one IDE drive - one even allows up to four drives.

The big question that concerned us was whether they were reliable and safe. Well, you can read the review this month, but the new answer Alex is that yes you can have more than one IDE device attached. You do need a conversion kit, or to by a drive which comes with one. Eyetech are selling their kits separately. The IDE drives are very cheap and very fast. Buy one now! I'm converted.

**Dave**

## The experts at hand to help you...



Whenever you try out something different with your Amiga, or buy a new piece of kit, you might come across problems that you don't know how to solve. That's what these pages are here for - to guide you through your difficulties and get you using and enjoying your machine to the full. We've got a great group of experts to hand with their own in-depth knowledge in special Amiga areas. So put them to the test, and send your queries in.



**Paul Overaa** is our Operating Systems programming expert. He has written several books, including: *Mastering Amiga Assembler*, *Mastering Amiga ARexx* and *Mastering Amiga C*. When he's not

drinking red wine or wind surfing, Paul can be found making music and designing programs on his Amiga.



**Gary Whiteley** is our expert on video and graphics. He regularly produces work for films and TV. Gary has also written several books on his favourite subjects - among them is *Amiga Desktop Video*, published by Future Publishing (call ☎ 01225 822511 to order a copy). Gary also regularly reviews new products for Amiga Shopper.



**John Kennedy** is our hardware and music expert. He has written *Supertests* and features alike for *Amiga Shopper* in the past. He also writes features and tutorials on a range of subjects for our sister

magazine *Amiga Format*. This month in *Amiga Shopper* John continues with his tutorial on *CanDo*.



**Larry Hickmott** is our DTP and word processing expert. He produces his own DTP magazine called *Em* and has written several books, including *The Wordworth Companion for Digita*.



## Answers contents

If you're looking for a particular problem, this handy index will help you find the answers you need:

<b>CD-ROM Drives</b>	<b>33</b>
<b>Hard drive problems</b>	<b>33</b>
<b>Colour printers</b>	<b>34</b>
<b>Floppy drives</b>	<b>34</b>
<b>Workbench</b>	<b>34</b>
<b>Accelerators</b>	<b>34/35</b>
<b>Word Processing</b>	<b>35</b>
<b>Programming</b>	<b>35/36</b>
<b>Blitz Basic</b>	<b>36</b>

### Conflicting reports



Hardware

When I purchased the 4Mb RAM board from Wizard developments, my hard drive started to act a little strange. If I warm reset the Amiga, the hard drive sometimes won't boot up and all I get is the "Insert Workbench" screen, but if I then boot from floppy, there is no sign of the hard drive. According to any program, I have no hard drive. If I turn the Amiga off and then on again, it always works fine.

If I remove the RAM board, there is no longer a problem. I also discovered that if I use a program called "HDSleep" which turns off the motor to the hard drive until it is accessed, and then warm reset, the hard drive boots up normally every time.

After a warm reset, and if the HD won't boot, I try to warm reset again and again, and suddenly the HD responds and boots as normal.

**Terje Karlsen  
Norway**

*It sounds like a conflict within your system and I can't see that you've any alternative but to go to Wizard and ask them whether they know of this problem and whether there is a solution. Normally I'd suggest checking all the connections on the drive and board, and this may still be worth doing, but if removing the board works every single time, then it is almost certainly a hardware conflict.*

**Dave**

### Printing possibility



Printers

I have been given a Hewlett Packard 660C colour printer but cannot find a driver for the printer. I would be obliged if anyone can offer me assistance with this.

**Laurie Young  
Fife**

*The only way you can get results from a printer like this is to get hold of a printer enhancement package like Print Studio or Turbo Print. I need more information on your system to tell you how viable using one is, but if you've got Workbench 2+, a hard drive and enough memory, you should be fine.*

*Printing times can be quite slow – remember that printing is the Amiga's one*

*failing point. One of these packages should set you back about £40. Contact Digita on 01395 270273 or Wizard Developments on 01322 272908.*

### Another problem solved



Hardware

Last month you answered a problem concerning an external floppy drive failing to work and giving unpredictable results. I agree that one the face of it the problem seems to lie with the drive, but discovered the answer on my own system after having the same problem.

I own both Cumana and Power drives and both of these makes were tested with absolutely identical results. I noticed that it was only when my printer was physically connected, but switched off, that DF12 tended to (but not always) exhibit read/write error messages (even with regularly used disks which were then confirmed to be error free on a second A500).

However, if I rebooted with the printer switched on, such errors were no longer reported using the very same disks in DF1 (the other symptoms such as disk name = DF1:???? also vanished). This confirmed that the earlier error messages were misleading and nothing was in fact wrong with either the drive or the floppy disk in the first place! Both my drives followed the pattern described and yet were shown to be perfectly healthy by re-testing a) after disconnecting the printer cable and b) on a second A500.

At a guess, I suspect that when the printer is connected but the power switched off, either a) this causes improper device configuration during booting or b) the printer's un-powered circuitry somehow interferes with normal operation of the external floppy disk interface circuitry inside the Amiga, via the printer cable.

**T Silk  
Canterbury**

*Well, thanks very much for writing in and helping out another reader. It's very good of you. We were all slightly agasp in the office when you read your letter.*

*It just goes to show how unpredictable computers can be when they feel like it. I'm*

*amazed that you managed to track down a fault which has such an unusual solution. Hats off to you!*

**Dave**

### Validate! Validate!



Beginners

1. How can I get the Workbench disk to validate? I can't add or delete anything until it does.
2. How can I clear up the mess?
3. Is there a list of files

somewhere that I can check to establish what should be there and what shouldn't?

The programs in the Work partition seem to be unaffected by this problem and work normally. Can you help please? I'd hate to think that I have done irreparable damage to a machine I have great respect for, and which is easy enough for my children and now even my wife to use. And yes, it is more friendly than the a PC which I use at work.

**David McDonald**

*The good news is that the Amiga will sort it itself out. When a disk becomes invalid, maybe a program crashed or the machine was switched off whilst writing to the disk, the Amiga operating system will try and fix the problem itself.*

*You can hear the drive busily whirring away once you switch it on, as the drive is validated once more. To make sure you don't make matters worse, the operating system marks the drive as in use and 100% full to prevent you writing or deleting anything.*

*All you have to do is let it work away by itself for a while and eventually everything will be back to normal. This process can take between five minutes and several hours depending on the size of the hard drive and the speed of the Amiga, so leave it be for a while and watch TV.*

*If you want to give your hard drive a treat, the best thing you can do is to give it a thorough checking and then de-fragment it. For this I recommend the Quarterback Disk Suite from Wizard Developments, (01322 272908) a bargain at £34.99.*

*The simplest way to check that all files are present and correct is to compare the contents of the Workbench partition with the contents of the Workbench floppy disk. You're bound to have picked up some extra fonts and utilities along the way.*

### A question of speed

#### Listing One

```
void Convert (int Number, int Base)
{
    if (Number >= Base)
    {
        Convert(Number/Base, Base);
    }
    PrintDigit(Number%Base);
}
```

● Listing 1: The C version of Andrew Elia's recursive number printing routine



Please insert volume  
CGFonts  
in any drive

Retry

Cancel

If you get this annoying requester when trying to type some text in ProPage, then you need to look at your User-startup sequence and make a sure you have all the correct assign commands in there. While you're at it, check out the PPage.ini file in the S drawer.

\*S:user-startup

```
;start CGFonts
Assign CGFonts: DTP_ToolBox:PPage4.8/CGFonts
Assign PPage: DTP_ToolBox:PPage4.8
Assign Spell: DTP_Toolbox:PPage4.8
Assign PDraw: DTP_ToolBox:PPage4.8/PDraw
Assign PDrawfonts: DTP_ToolBox:PPage4.8/PDraw/PDrawFonts
;end CGFonts
```

2111 / 32%



I am considering buying the Blizzard 1230-IV as an upgrade to my Apollo 25Mhz, 4Mb board.

1. If I were to add 8Mb to the board would the PCMCIA port be disabled?
2. Would a SCSI hard drive fitted via the Blizzard SCSI module be any faster than the internal IDE one?
3. My internal IDE drive seems to be faster (according to SysInfo) since adding the Apollo, is this right?
4. If the above is true, would the Blizzard speed the hard drive up any more?
5. What sort of speed increase does ROM shadowing give?
6. Is there an OS3.1 upgrade for the A1200 and is there a great difference to that of the OS3.0.
7. Is there any software which will read audio data from my Sanyo CD-ROM drive and save it as an IFF or RAW sound file on my hard drive?

David Bateman  
York

1. No. As the Blizzard has its own processor (a 68030) it places the extra memory in its own memory map away from the PCMCIA port and associated problems.
2. That depends on the performance of the SCSI hard drive. In general a good new SCSI2 hard drive can work at up to 5Mb/s so it should be faster than an internal IDE drive. How much of a difference this speed actually makes to everyday Amiga Workbench use is a good question: probably not enough to merit the extra cost.
3. Certainly. The Amiga has work to do in reading data from any hard drive. The faster the Amiga, the faster the hard drive – until the hard drive reaches its internal speed limit anyway. Adding some memory to a stock A1200 will almost double its speed and therefore speed up the hard drive into the bargain.
4. Yes, the Blizzard will speed up the internal hard drive further still, although it could be that the speed limit of the IDE mechanism is reached so it won't be as dramatic an

improvement over the first 4Mb Apollo expansion.

5. Negligible. About 5% on a good day. Perhaps if you are rendering a thousand frame animation it could be worthwhile. I prefer to have the 1Mb of RAM it consumes free for my own programs to use
6. Yes, there is. It's available from Blittersoft (01908 261466) in the UK. It offers little to the existing OS3.0, especially A1200 owners. Some of the new features include a CD-ROM filing system (anyone with a CD-ROM will have one anyway) and better support for Workbench and graphics cards (you can't fit a graphics card to an A1200). Better off waiting for the promised upgrade from VisCorp.
7. I don't think Sanyo CD-ROM drives are compatible with CD-DA – the compact disk digital audio standard – which is required to allow audio data to be read over the SCSI bus. Check the drive specs for the magic "CDDA". If it's there then look for utilities such as "Interplay", "Jukebox" and "PlayCDDA" which are all available from the Aminet.

John

## SAS C Bargain?



I've heard that it's possible to buy SAS C at some ridiculously low price now. Can you tell me if this is true and if so, who is selling it and would it be a good buy?

Dave Peters  
Stirling, Scotland

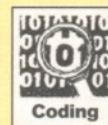
SAS C is not available in the UK either at its original price or on special offer. Although I have no details as such I also have heard a rumour that it is being sold as a discontinued product for the equivalent of about £20 or £30. This is bound to be from a US or Canadian supplier so... if any suppliers connected with this offer can email Amiga Shopper ASAP to confirm this – we'll pass on the details and probably get you lots of orders!

Is it worth it? You better believe it – SAS C was THE compiler of choice and, providing the

packages being sold include the original documentation (which was worth its weight in gold), then it'll probably be the best twenty or thirty quid you've ever spent. I still use SAS C regularly and I know a great many other coders that do the same. You do incidentally need a hard disk machine to use the last version (v6.50) that was released!

Paul

## Blitz Gadgets



I have a problem that I hope you can help with. I'm attempting to set up a PD library and want to use Blitz Basic 2 to write the catalogue. I need a ListView gadget to display the programs in each section, i.e. applications, games, animations and so on. Drawing the gadget seemed easy enough but I just can't seem to access the options. I've enclosed my source code for drawing the

## Listing Three

```
/* ..... */
/* Recursive print/base-conversion example
   program - */
/* ..... */
#include <stdio.h>
#include <ctype.h>

void Convert(int Number,int Base);
main()
{
    Convert(73,36); /* find 73 as a base 36
    number! */
}
/* ..... */
void Convert(int Number,int Base)
{
    if (Number>=Base)
    {
        Convert(Number/Base,Base);
    }
    putchar(0x30+Number%Base);
}
/* ..... */
```

● Listing 3: A runnable test program that uses the routine which Andrew Elia supplied!



## Listing Two

```

Push    MACRO
        Move.L \1,-(A7)
        ENDM

Pop      MACRO
        Move.L +(A7),\1
        ENDM

Discard  MACRO
        Add.L #\1*4,A7
        ENDM

Start    Move.L      #Number,A0
        Move.L      #5780,D0 ; An example of a number ie. 5780 in decimal
        Move.L      #10,D1  ; Convert it to base 10 (easy!)
        Push D1       ; Stick 'em both
        Push D0       ; onto the stack
        Bsr Convert  ; Now call the subroutine - Bsr NOT Bra!
        Discard 2     ; Clean up the stack - exit gracefully!
        Rts          ; Ta da!

Convert: Move.L      4(A7),D0 ; Pull Number and Base from inside the stack
        Move.L      8(A7),D1 ; Don't forget that when a Bsr instruction is
        Cmp.W       D0,D1    ; issued, an extra 4 bytes are pushed!
        Bhi Digit    ; Jump if Base > Number --> Number >= Base FALSE
        Push        D1
        Divu.W       D1,D    ; Strip the division remainder from the result
        Andi.L      #$FFFF,D0
        Push D0
        Bsr         Convert ; Recursion time!   Discard 2

        ; Clean up the stack - VERY important!
Digit:   Move.L      4(A7),D0 ; It may seem silly, but we must copy the data
        Move.L      8(A7),D1 ; for Number and Base into registers again
        Divu.W       D1,D0    ; (this is for when other recursions return)
        Swap.W       D0       ; Swap hi & lo words to get the remainder
        Bsr PrintDigit
        Rts
PrintDigit: Add.B     #48,D0   ; ASCII code for '0' is 48, so add 48 to number
        Move.B      D0,(A0)+ ; Stick that digit at the next position in memory
        Rts
Number:   Ds.B 10          ; Reserve a extra few bytes for the result

```

● Listing 2: Andrew Elia's recursive number printing routine using 680x0 assembler.

value needs to be pushed at each loop). All the instances of 'Base' (or indeed, D1) can be replaced by the number 10. I hope this helps.

**Andrew George Elia**  
received by email

Andrew, nice to get your input. Needless to say the chap who asked the original decimal numbers question was a newcomer to coding and the standard printf() method I mentioned was probably best in this sense. The more sophisticated routines you have provided however are very nice indeed and perhaps the most important thing is that they provide a particularly clean approach to base conversion - what a great underlying algorithm!

I've reproduced them (see listings 1 and 2) to give everyone a chance to see them. Thanks again. There are a couple of things however that ought to be mentioned for anyone wishing to experiment with your routines: Firstly, newcomers need to remember that the PrintDigit() reference in the original C listing is just a general label. In practice the ANSI putchar() function could be used and here of course, since the values being generated are numerical, it would be necessary to add 30 hex (0x30) to each value in order to produce the ASCII character equivalent of the digit.

Listing 3 shows a short compilable (SAS C coded) example that can be used directly. The second point is that there is a restriction that limits the range of bases that can be used in practice to between 2 and 36 - this is nothing to do with the underlying algorithm - it's because you only have the digits 0-9 and the characters A-Z for representing higher base numbers. Needless to say all base conversion routines suffer from the same problem in this respect!

**Paul**

gadget and hope you can help.

**Darryn Lowe Hawera**  
**South Taranaki**  
**New Zealand**

Darryn first accept our apologies for hanging onto your letter for a while. Yours was one of many letters we've received connected with ListView gadgets and, since the difficulties had a common theme, we wanted to devote a complete tutorial to this area. For space reasons however this had to wait until the HiSoft BASIC series was finished. Hopefully the Blitz tutorial in this issue will tell you all you need to know!

**Paul**

## Interesting Use of Recursion



I've just been reading issue 66 of AS and came across a request from some anonymous individual who wanted to convert numbers stored in registers into a string of ASCII characters so that they could be printed on the screen easily. I have an alternative recursive-based method that achieves the same type of result which you may be interested in.

In essence, the code works by knocking

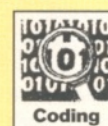
digits off the left hand side of the number and dealing with the number that falls off the end. This makes it easier to print, because obviously we do it from left to right. In programming terms, it would be a doddle to just knock the right-most-digit off the number, because all we need is a simple loop that sits there and divides the number by ten each time round and then looks at the remainder of the division. We're actually doing the same thing here, except that the division is being delayed until we've worked our way through the entire number.

When we reach the end of the recursion, each function call will finish, and the bit afterwards, namely our calculation on the remainder, will be executed.

The code is however, a little more than just a decimal to ASCII converter. It takes two values: 'Number' is the number you wish to convert, which would be held in a register or variable or something, and 'Base'. By altering this second value you can literally change the number base that the result will be printed in. So, if you make 'Base' equal to 8, you will have a result in octal (base 8) and so on.

The code I've supplied has been made deliberately general so that your readers can understand the concepts behind base conversion with this method. For converting to ASCII, programs can be significantly shortened (and in the assembly language version only one

## And More Blitz...



Help, for over two months now I've been playing around with Blitz BASIC gadgets. Everything is fine apart from the list-view type. I've read, and re-read, the manual and it seems to make sense. But I'm still no nearer producing working code than when I started (I've enclosed my latest attempts). I'm actually beginning to think that there might be some fault with Blitz itself. Do you know of reports of bugs in this area or, if not, do you have any other ideas on what is going wrong?

**Peter Esgrove**  
**London**

Sorry to be the bearer of bad news but the problem lies in your code, not with Blitz. I suspect that you've pieced together your program from the bits of information provided in the Blitz manual without realising what the various fragments are actually doing. It's not your fault - the Blitz manual, like all other BASIC manuals, just doesn't have the space to go into the underlying system areas, such as the gadget-related use of system flags, ordinal numbers of ListView gadgets, and so on. Hopefully this month's tutorial on the former subject will help!

**Paul**



Choice

# Domain

Take your pick of PD this month from databases and disk mags to educational programs and music utilities – they're all here over the next four pages...

## Cool Stars 1.0



This is a very simple extension for the AMOS Pro programming language. Once installed, which is very easy to accomplish, you have 22 new commands at your disposal

to manipulate starfields. The author has provided plenty of example source and all the commands are easy to use. The starfields you can produce are super fast and very smooth, mainly because *Cool Stars* is a real extension and is written in pure Assembler.

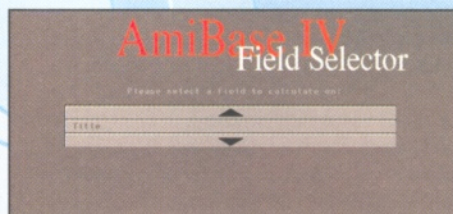
The review copy is a Shareware version which displays a Shareware 'nag' screen every time you load and quit AMOS Pro, which is very irritating. To get rid of this you need to register. This is a very good professionally-produced extension. It only caters for a niche of AMOS programmers, but those who do require this sort of thing will be over the moon with it.

**Verdict: 92%**

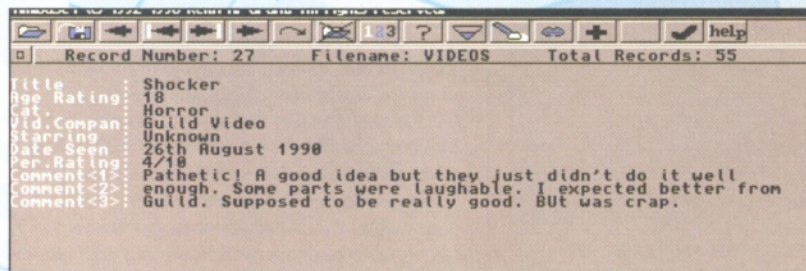
**Star buy**

## AmiBase 4

There are some really good PD/Shareware databases around at the moment and after



The welcoming screen for AmiBase 4 doesn't exactly fill you with confidence.



reading the documents of *AmiBase 4* I was hoping that it too would be one of the better ones. To be fair, it is not the worst database around by far, but then again it is hardly state-of-the-art. On loading the main program, which is

written in AMOS, you are immediately hit with the prompt, 'What is the maximum fields you will use today', this had me worried straight away. To make matters worse, there are no nice gadgets or requesters to respond to – it is a 'type it on the screen' affair. On my first attempt, I typed in that I wanted eight fields today, I then proceeded to load in an example database file only to be told that I hadn't allocated enough space for this database. The only way around

*Oh dear. Shocker! I was thinking along similar lines about AmiBase4, but I wouldn't dare be that rude about it!*

this (that I can find) was to quit the whole program and reload it, which is appalling. This Shareware version only supports 30 fields. Once I had a loaded example in *AmiBase 4* I had a look around. There is a strip of icons

## Who, what, where, when, why, how...

Product	No. of disks	Type of product	Price	Supplier	Contact	Verdict	Page
Cool Stars 1.0	1	AMOS extension	£1	R. Thompson	01773 83572	92%	37
AmiBase 4	1	Database	75p	Online PD	01704 834335	55%	37
Exploring The World	2	Multimedia	£1.50	OnLine PD	01704 834335	80%	38
Third Dimension 27	1	3D const kit mag	90p	Roberta Smith DTP	0181 455 1626	91%	38
6th Form Volume II	1	Compilation	90p	Roberta Smith DTP	0181 455 1626	77%	38
NetSurfer #6	1	Compilation	90p	Roberta Smith DTP	0181 455 1626	93%	38
Disk Mag Creator 3.0	2	Disk Mag Creator	£6.99	F1 Software		92%	38
ProTracker 3.53	95K	Music Editor	N/A	Aminet/mus/edit/protracker353.lha		97%	39
mNews 1.0	59K	News Reader	N/A	Aminet/comm/news/mNews1_0b.lha		90%	40
DIP 1.0	5K	Disk Imager	N/A	Aminet/disk/misc/DIP.lha		80%	40
WebPlug 1.0	114K	HTML Editor	N/A	Aminet/comm/www/webplugv10.lha		88%	40



along the top of the main screen for the essential functions, like load and save, and a pull-down menu for most of the other functions. The main database display looks boring and unapproachable because there are no gadgets to edit records or fields in this program. Jobs like searching, copying, pasting and calculating are done on a separate screen which makes this feel even more like a clanky old BASIC program.

But AmiBase 4 seems to be stable, which it should be, this being version 4. Beginners may find its unorthodox approach more difficult to get used to and understand, but it comes with well written and concise documentation which should help them master it. The Shareware version reviewed here has a limit of 30 records, the full version costs £15. Only you can decide if it is worth that much to you.

**Verdict: 55%**

## Exploring The World

*Exploring The World* is by the same author as *World Of Animals* which we reviewed four issues ago and rated it at 84 per cent, although I had some reservations about the value of the product compared to a book on the same subject. *Exploring The World* uses exactly the



*Exploring The World's front-end is attractive. The globe starts spinning when you click on it - well, in a fashion.*



same type of interface (written using *HyperBook*) which is attractive and easy to use. *Exploring The World* enables you to 'explore' what a country's flag looks like, delve into data on population, religion and culture and, of course, view the obligatory picture.

Like *World Of Animals*, it is all well produced but somehow lacks any wow factor. Children may have fun clicking around the easy to navigate interface and taking in the simple data on offer, but I reckon they'd soon tire of it.

**Verdict: 80%**

## Third Dimension Issue 27



Yet another issue of the marvellous *3D Construction Kit* disk mag. We reviewed issue 26 last month and remarked how superb this magazine is, and accordingly slapped a

whopping 91 per cent on the review. This new issue somehow manages to maintain the quality and quantity of files, tutorials and articles for all *3D Construction Kit* users. This is a multi-platform mag, Atari ST, PC and Amiga and I believe it to be the only multi-platform mag to succeed for more than one or two issues. Congratulations to everyone involved in the production of *Third Dimension*.

**Verdict: 91%**

Star buy

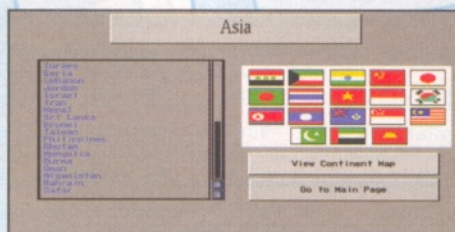
## 6th Form Volume II

This compilation disk from Roberta Smith contains six educational programs of varying quality. The most outstanding is *Calculation Trainer* - a simple program that gives you calculations to work out. We are not talking anything complex here, just simple multiplication, addition and subtraction.

*Calculation Trainer* requires MUI, which hoists its look and feel out of the depths of degradation quite often associated with this sort of program, a great example of this can also be found on this compilation disk under the name of *Forest Fire* which very probably uses a fantastically complex algorithm to simulate a forest fire, but boy, the author needs to learn a bit about presentation and GUIs. I realise that it is the function of the program that is more important in this particular case, but a few buttons and gadgets or even a menu can't be that difficult for any seasoned programmer.

Basic information is available, but more details would improve Exploring the World.

Below: The flags screen has more flags than you could shake a small stick at.



Also on this disk is a *Spectrum Analyser* program which is all in Polish, including the documentation. I couldn't make head nor tail of it, but I suspect that if you are already into this subject you could work out what to do. *Orbit* is

a stats program for predicting satellite paths. *Topograph* is a function browser, according to the documents it gives both qualitative and accurate numerical information about any function you give it to work on. The final program on this disk is *GlossTalk* which is a demo version of a vocabulary list builder.

**Verdict: 77%**

## NetSurfer #6



Don't be put off this disk if you are not connected to the Internet because it has nothing to do with it, even though the title suggests otherwise. On this utility compilation are 10 programs to delight and amaze you all. For example, there is a great *AMOS Pro* extension called *Cool Stars* (see page 37).

Another one for *AMOS Pro* users is a *Shareware Assembler Acc*, which really makes this disk worth getting if you use *AMOS*. There is also *Appserver* with which you can drag icons from your Workbench on to an Applcon to be processed - that is, a picture will be displayed or a music module will be played. *Check Space* is a useful utility to warn you when space is low on a particular partition.

*DOSPrefs* is a commodity that enables you to control the Wildstar flag of the Amiga OS 2.0+ dos.library, the No click flags of the Amiga OS 2.0+ trackdisk.device and provides all new Unixdirs featured. With *FloppTest* you can test a floppy disk before it is formatted - something I have never seen done before. It does this by letting you run the disk drive head over the disk, then you have to listen for anything dodgy. It's all a bit unscientific, but it works.

*PS3Mrec* is another newish idea and it enables you to turn music Mods into one long IFF or AIFF sound sample. Could be useful, one day. The other programs on this disk are, *PFactor* which prints Prime factorisations of your chosen number and *XSize* with which you can resize your Workbench windows in all directions. Overall, this a good set of interesting utilities that represent value for money.

**Verdict: 93%**

Star buy

## LicencewareChoice

## Disk Mag Creator 3.0



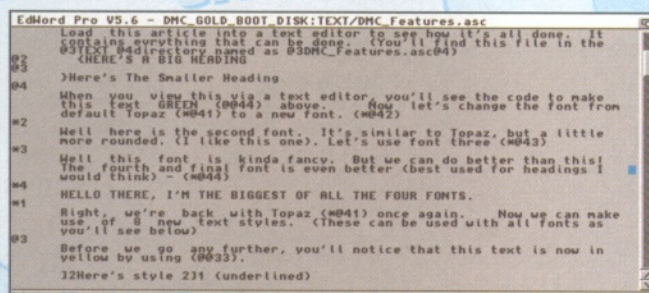
DMC has been around for a few years now and has been used for many PD libraries' disk catalogues and on quite a few disk mag productions. DMC has recently been significantly updated to version 3.0. But first we will explain roughly how a DMC works. DMC is a pre-coded disk magazine that you can configure in many ways to make up your own disk mag or product catalogue disk.

Initially, it looks quite complex because of the vast range of features on offer, but after a quick browse of the manual and booting disk 1, which is a demo of a disk mag and how it should be done, it is all fairly straightforward.





Disk one of the DMC package has a ready-made magazine for you to boot up. It contains quite a lot of informative extras to the printed manual.



This is what a DMC article looks like in a text editor. This particular page shows you how to use all the available codes. Pages are not normally this complex looking, unless you want them to be.

Basically, to create your own disk magazine or catalogue, you must first gather all your text files, music modules and pictures together. You can use a text editor, such as *Edword Pro*, to add text effects like colours, flashing text, different fonts and even add some clip art to brighten up your screens of text. These features are achieved by inserting simple codes into your articles. The codes are not printed on the screen when the disk mag is run, of course. It is similar to HTML in some ways, and all the codes are all fully explained in DMC's A5, 46-page manual.

If you have problems, look at the articles from *DMC disk 1* by loading them into your text editor to see how they were created. Once you have your text files ready you need to copy them to a DMC skeleton disk. A DMS archive file is supplied on disk two of *DMC* to automatically create this disk for you, which is very handy.

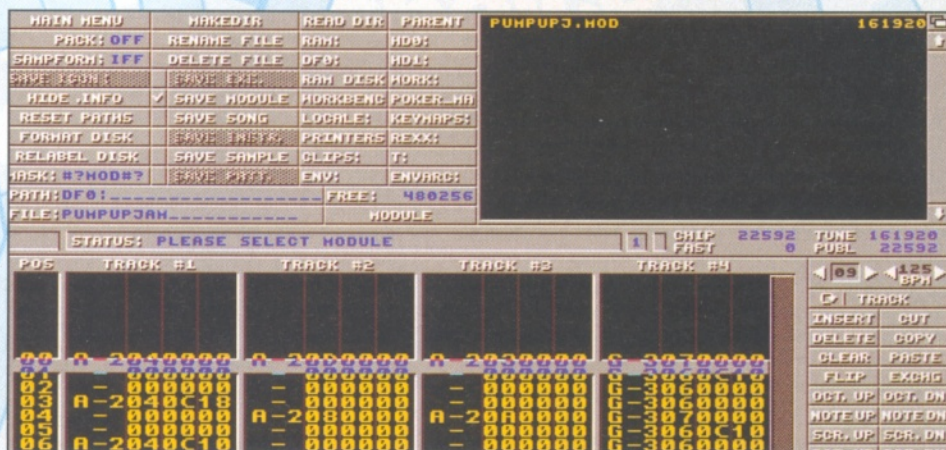
*DMC* supports IFF animation and up to 10 loading screens, though, disappointingly, you can only use a maximum of 32 colours per screen. It is easy to add *ProTracker* music modules and create or edit the DMC panel at the bottom of the screen. You can alter virtually every aspect of *DMC* to make it your look like your very own production without programming a single line of code, though the great thing is that you don't have to change anything except for adding text files if you are lazy.

If you are short of space on your disk you can use the supplied packer called *CrunchMania* to crunch all your text, pictures and modules to a fraction of their original size. *DMC* automatically uncrunches these files for you, so once crunched you don't need to do anything else to them. *DMC* also supports multi-

disk efforts so there is no limit to the size you can make your catalogue or magazine. A new and much needed feature in version 3 is the search option, which works well and will be useful for database type searches of product listings, and so on. Also new to version 3 is enhanced printing modes, built-in fonts, eight text styles, a backdrop pic which, of course, can be changed if you wish, an article tester utility and a config maker,

which was written by the author, due to an unfavourable review by a rival mag, which all help to make the package easy to use. I am sure the *Config Maker* utility will be of help to *DMC* newcomers, but for seasoned *DMC* veterans I think the more flexible approach of editing your own config files was better. The great shame is

This new version of *ProTracker* packs in even more features than before - which means it retains its number one spot on the top Amiga music editors list.



that now it appears that you have to use the *Config Maker*, like it or not. I don't think this will go down too well with *DMC 2* owners upgrading, but then again it will hopefully help beginners to create their first disk magazine.

**Verdict: 92%**

**Star buy**

**AminetChoice**

## ProTracker 3.53



Trackers have been with us since the days of the beloved Commodore 64 when coding groups wrote their own music editors for their productions and eventually released them into the

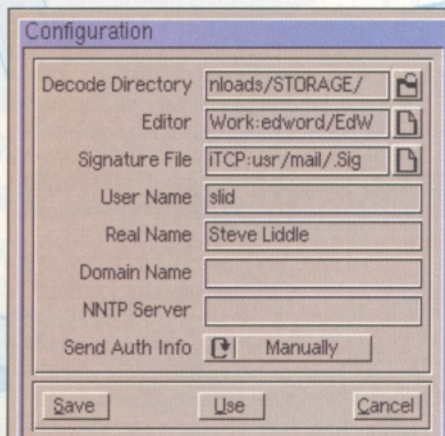
Public Domain. A Tracker is a utility that strings together sound samples to form a song, the resultant data and sound samples are saved out in one file called a mod, or music module.

There have been many variations of Trackers and all have their good and bad sides, but for me, and many others, *ProTracker* has always been the number one Tracker. Throughout *ProTracker's* history many coders have had a crack at expanding and improving it and released the result into the PD - a generous gesture.

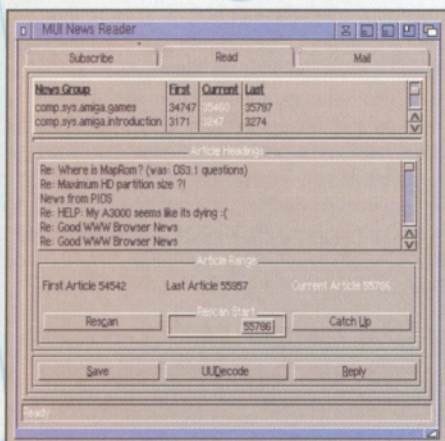
This latest release adds yet more features to the already bulging features list of *ProTracker*. The main enhancements are a decent help system, XPK Mod support, a PED instrument editor and many others, including some important bug fixes.

There is also a *ProTracker* support archive on Aminet containing the source for playback routines, full re-written AmigaGuide instructions and various utilities and modules to play about with. The great thing about this program is that





Configuring mNews is a doddle with this opening requester, thanks to MUI.



Double click on an article to view it.

you need never touch half of the features if you don't want to. A total beginner can load in a Mod and play about with until it sounds completely different. But if you do want to get the best out of the program it will take weeks just to learn how to use the mountains of features on offer.

To really do *ProTracker* justice I would need at least four pages, but to sum up in a sentence, this is a fantastic piece of software that anyone and everyone can have a lot of fun with.

**Verdict: 97%**

**Star buy**

## mNews 1.0



This new Newsreader requires *AmiTCP 4* and *MUI* to work. It is very easy to set up using the configuration menu, there are no dodgy text files to edit, it appears to work well and is stable.

After filling out the configuration requester you can get down to subscribing to some Newsgroups. This is achieved by clicking on 'Scan' to download the Newsgroup list – which can take a very long time – or you can simply type in the names of the groups you wish to subscribe to by hand.

Once you set up your groups you click on 'Read' and then click on a Newsgroup. The



Nice and easy. Type in the Newsgroups you wish to subscribe to, or click on the 'Scan' button to download that huge list of Newsgroups.

article headers for the selected group are then downloaded. You can read the messages on-line or save them out (one by one) to read later. A batch download would certainly be a welcome feature here. To reply to a message you simply click on 'Reply' and the text editor you chose in the configuration is loaded and you type away as per usual. Your message is then posted automatically. Beware that there is no way for you to 'cancel' a message once you start writing it, a feature which is desperately needed for this type of program.

Another bug is that when you 'reply' to a post, the text you type does not always get sent! Once you have read all the messages in a particular group you click on 'Catch Up' so that next time you read that particular group you will just get the latest new messages. UUdecoding is supported and some reasonable documentation is supplied.

This is an early version and is looking good so far. I like the clean and easy look of *mNews* with the aid of *MUI*, I had no problems with it apart from the couple of niggles mentioned earlier. This could be a very useful program in the making and I look forward to the next update.

**Verdict: 90%**

**Star buy**

## DIP 1.0

*DIP* stands for, *Disk Imaging Program*. It is a tiny (1,892 bytes) utility written in *Assembler* to create a single file from a floppy disk. This is exactly what the popular *DMS (Disk Masher)* archiver does, but where *DIP* differs is that it reads tracks of the disk that are flagged as unused whereas *DMS* does not, this is why *DMS* fails to archive some non-DOS disks.

*DIP* does not archive the file it produces for you, you have to do that separately with *LZX* or whatever you prefer. This means you can achieve a lot smaller archives with *DIP* than you can with *DMS*. *DIP* has no GUI interface, the author says it would just add to the size of the *DIP* executable. I think a simple GUI with the option to auto pack the image with your chosen

archiver would help, though that would be easy to achieve with a simple AmigaDOS script. The *DIP Assembler* source is also included with the archive. At first we liked *DIP*, but one snag is that to recreate a floppy disk from a *DIP* file, you first have to format the floppy – *DMS* does this for you while unpacking. Again, this can be solved with a homemade script, but it is slower than *DMS*. I still prefer *DMS*, but future versions of *DIP* may change my mind.

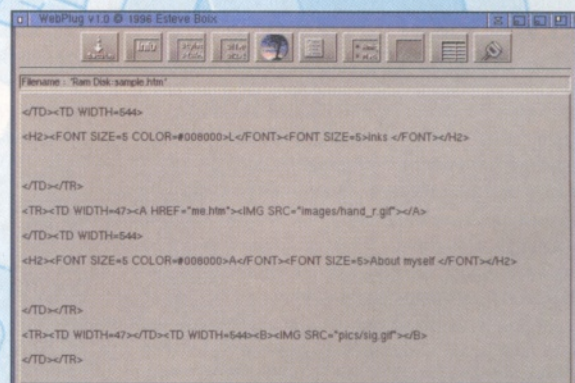
**Verdict: 80%**

## WebPlug 1.0

I find it hard to use one of these HTML editors since I've always used a text editor on my Web pages. But *WebPlug* can be useful. There is no doubt that once familiar with programs like *WebPlug* you will never understand why old fools like me stick to doing it the hard way.

*WebPlug* can handle all the usual HTML syntax as well as forms/graphics and tables. For example, adding a set of radio buttons or gadgets just takes a little text input and a few clicks of the mouse. *WebPlug* uses *MUI* for its nice front-end which makes it clear, configurable and easy to use. *WebPlug* will even send your newly-created page directly to your Web browser and run it for you. If an HTML editor was ever to convert me from my text editor, *WebPlug* could be the one.

**Verdict: 88%**



*WebPlug* is on this month's Coverdisk.

## PD submissions

If you have some exciting PD disks that you would like to be considered for review in *Domain Choice*, send them in to *Amiga Shopper*, Future Publishing, 30 Monmouth Street, Bath BA1 2BW, clearly marked as a PD submission. We welcome any type of disk, except games.

If you are a PD house, make sure you include all the information necessary, such as how to contact you, how much the disks cost and how people can pay. If you are the author of the program, state where people can get your program from, and whether you would like us to consider it for inclusion on a future *ShopperChoice* Coverdisk.



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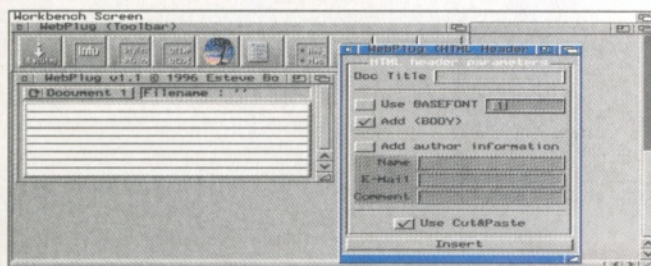
# Create your WWW page the easy way

David Taylor shows you how to create your own WWW page using the WebPlug program included on the Coverdisk.

**T**here are now a couple of HTML editors available for the Amiga, and we have included WebPlug on the Amiga Shopper Coverdisk this month. It uses MUI for its interface.

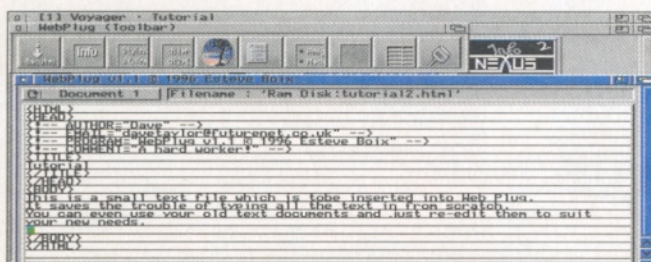
Although we're using WebPlug for the basis of this tutorial, we will at each point

show you what the code generated is, so that you can simply create it yourself in your own text editor. It will take you a little longer that way – after all, that's what WebPlug is there to help eliminate – but it will work. To view your results, you need an HTML viewer, like AMosaic, Voyager or AWeb for the non-MUI users.



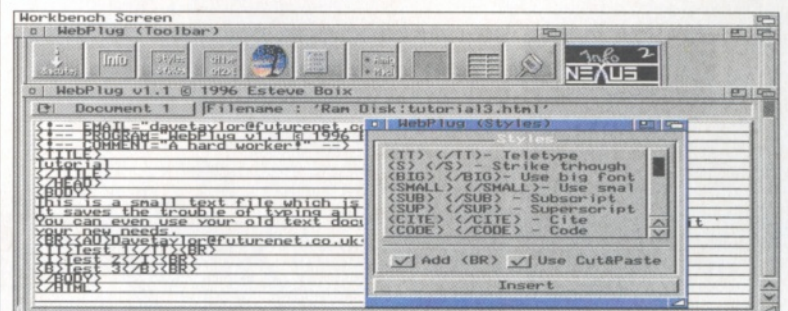
**1** When the interface first starts up, you need to select the name for the page you will create. Click on the second icon from the left and this window will appear, into which you can enter the information. It also enables you to add author information. The actual code this will add, which is what defines the HTML page, is as follows:

```
<HTML>
<HEAD>
<TITLE>
</TITLE>
</HEAD>
</HTML>
```

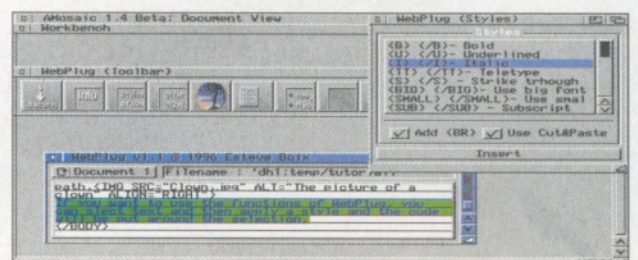


**2** The start and end of the document have been set. You now need to enter the text that you want to appear on the page itself. If you are creating the page from scratch then you can just type the text into the page directly. The body copy for the text needs to be inserted between two <BODY> entries. If you have an ASCII text file that you want to use as the main text, which you might have created earlier, then you can load this in by putting the cursor inbetween the <BODY> entries and selecting Include from the File menu. Although it is set to only show HTML, you can change that pattern and load any text file.

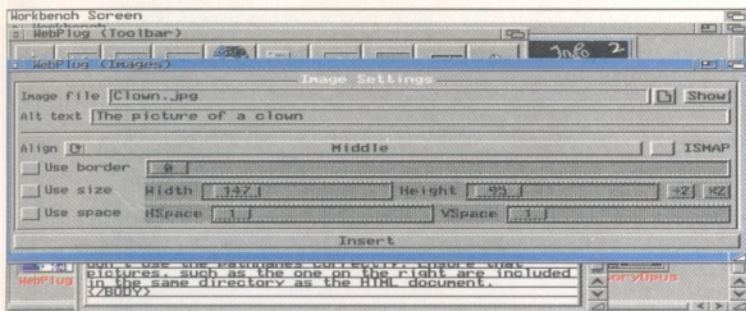
**3** You aren't limited to the normal text style though, you can also use italics or bold, which you should use where appropriate. Remember that different styles are there for the purpose of attracting the reader to pertinent points. Do not overuse them because the reader will not understand why you have bolded out reams and reams of text. The point is to attract the eye to a relevant piece of information. After all, you're trying to make your page as easy to read as possible. When you want to add a line feed (carriage return or new line), simply end a line with <BR>. If you use WebPlug to change the style, from the third icon from the left, you have the opportunity to add this code in automatically after the end of the style. The code for Teletype is <TT> </TT>, for bold <B> </B> and for italic <I> </I>. When you use the program to insert these types of code, make sure you move the cursor between the start code and the end code so that it appears in that style, for example: <B>example</B>.



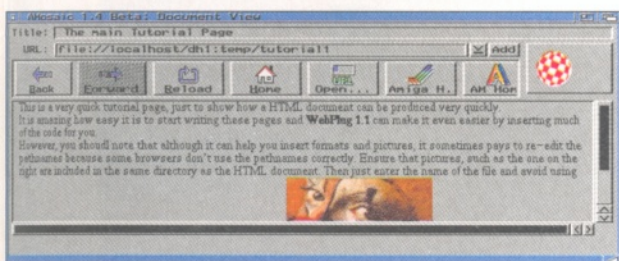
**4** WebPlug offers an easy way to insert styles and it is best to get into this habit because it makes other insertions, such as links, a lot easier too. All you need to do is write all the text in that you want to use, or import the text document you want. Then highlight a section by clicking the left mouse button at the start, holding it down and wanding down to the end of the section. It will now appear in green. Now select the style from the Style window and the codes will be put around the highlighted section.





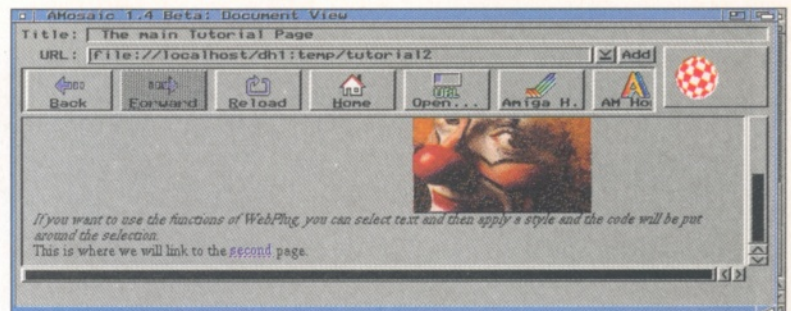
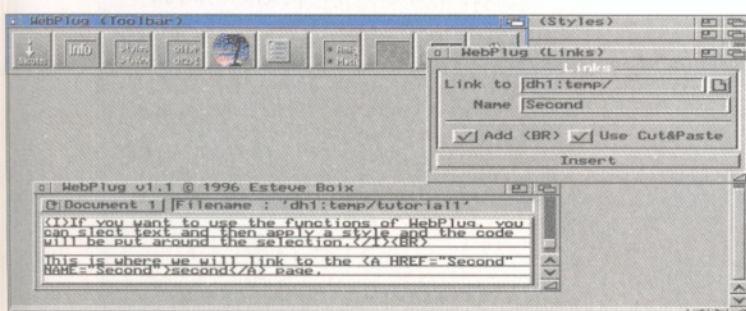


**5** With different text styles inserted, you may want to include a picture in your document. This is where HTML differs in one respect from AmigaGuide because it allows pictures to be placed on the same page as text. To insert a picture, choose the Picture icon – fifth from the left. In the Image file section, you need to put the filename of the picture. You should note that although you can select the file with a requester, some browsers seem to have trouble opening the links. The best solution is to make sure all your pictures are in the same directory as the HTML document is saved in, and then to just use the filename without its path because the browser will find it in the current directory automatically. If you do select it with a requester, simply re-edit the line of code generated so that it doesn't have the path. You also need to set how the picture will align with the last line of text. The code needed for a picture is: `<IMG SRC="Picture.gif" ALIGN="TOP">`. Obviously, you can choose different types of pictures, but you need to make sure browsers can open the filetype. Bear in mind that most WWW pictures are GIFs and some JPEGs. You can also align the picture RIGHT, LEFT, BOTTOM, etc.

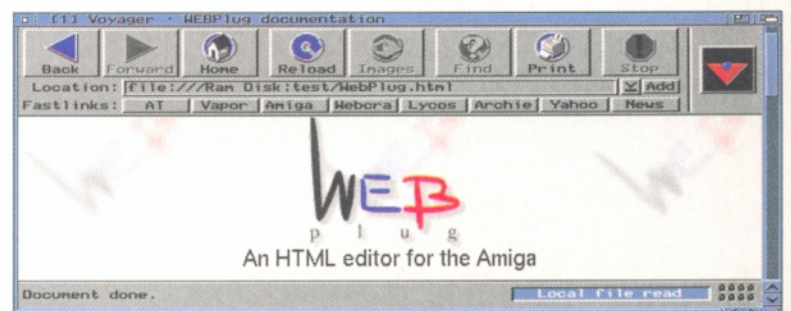
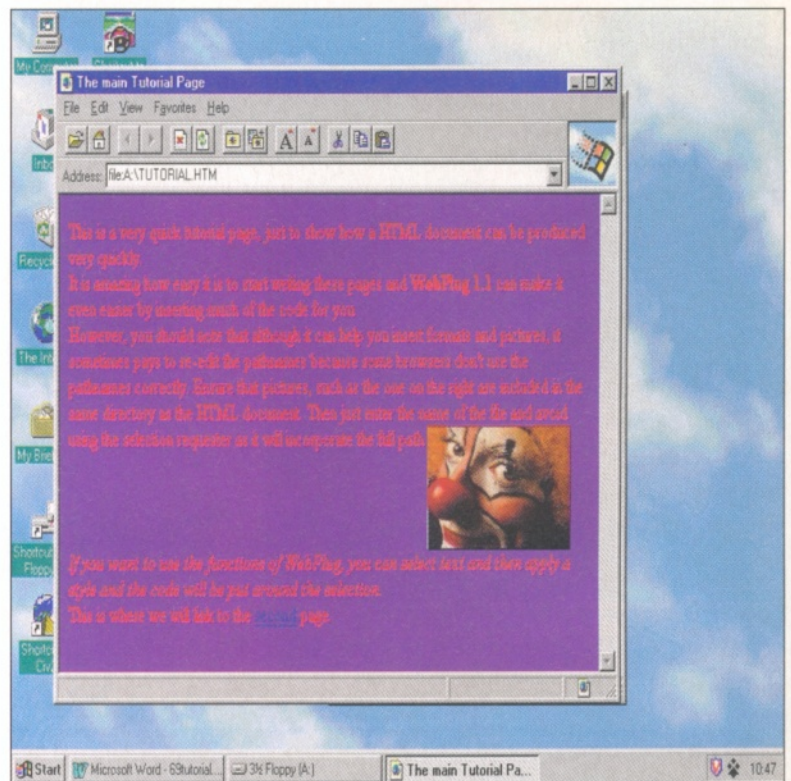


**6** As you can see in the above picture, the document so far includes a title, some text, some bold text and a picture. It all works fine in Amiga browsers.

**7** The way in which HTML pages work is similar to the hypertext documents which we use all the time as AmigaGuides. This means that you can put links on certain words if you want to, so that when the cursor is clicked on that word it will link and move to a predefined page. This is a useful way of cross-referencing. The easiest way to do a link is to make sure that the other document is in the same directory as the original, or at least that it will be – it doesn't actually have to exist when you are editing this one (although if it doesn't exist when the user comes to clicking on the link, they will get an error). Now write the line which contains the link word and then highlight the word. Select the Link window on the far right. You need to write in the name of the link, then in the Link To box write in the filename of the other HTML document. Click on Insert and the code will be added for the link. If the link word is in the middle of a sentence, make sure you don't have the Add `<BR>` code option on as this will add a line break. The code you need to add around a link word is: `<A HREF="Second.htm" NAME="newlink">second</A>`. The last "second" is the actual word on the page which is highlighted.



**8 & 9** The final page is displayed easily in most browsers, regardless of the platform. This is a basic HTML document and you can do much more complex ones, either coding them yourself or using a creator like WebPlug. If you want to do even more, then read the documents with WebPlug and take a look at the docs as code so you can see how they are constructed. It's then a small step to using that code for your own pages. As you can see from the PC screenshot below, we included some code in the document that changed the background and text colour – although AMosaic couldn't pick it up. The code is generated from the Background icon (third from the right) and inserts the colours' hexadecimal code (hence the reason we can't give the code here). It's done by selecting the colour from a requester.



**10** The documents for WebPlug have been created using the program. As you can see they are more detailed than this small example. ■



# CanDo

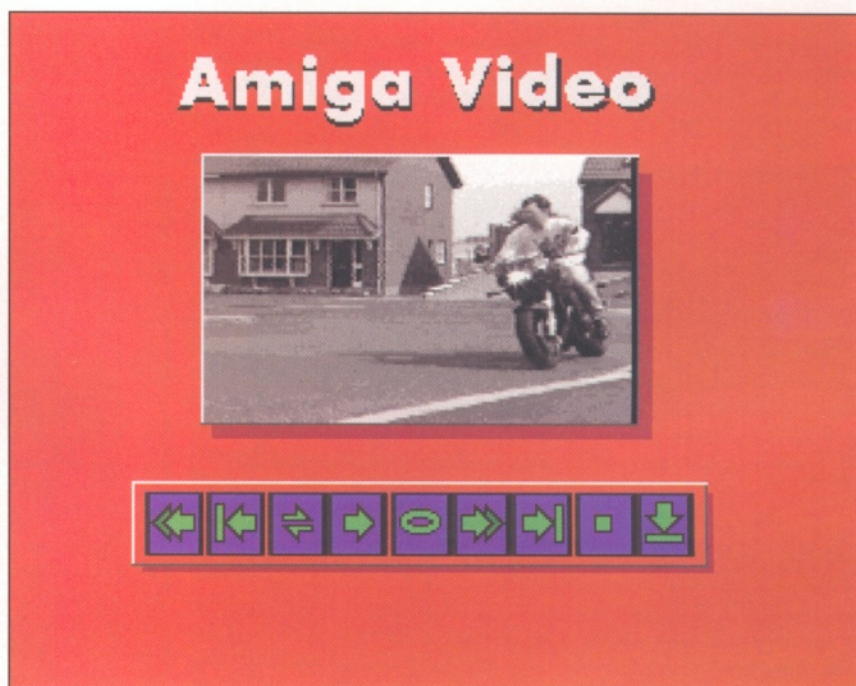
## part 6



This month, in his CanDo tutorial, **John Kennedy** combines the video playback deck with the rest of the multimedia database.



**1** Last month we designed and built a deck which could load and display a brush animation, complete with video-recorder style controls. Since then, I've glammed my own player up, and it now looks like this. I've added a few more buttons, such as the "frame advance", "continuous play" and "ping-pong play" buttons.



## Multimedia with CanDo

CanDo can synchronise an action to a particular frame of an animation. The most obvious example of this is to provide a sound effect and make sure it happens at exactly the right time. For example, if you have digitised a sequence featuring a person talking, you can combine the animation of them speaking with a sound sample of them talking. This makes for some extremely impressive multimedia applications: to be honest you won't see much like it even in commercial products.

The main reason is the large amount of space required to store animations and sound, and also the very few Amiga products distributed on CD-ROM. However, if you have a hard disk there is nothing to stop you creating your own programs. If you are interested, I recommend you investigate the VideoMaster system from Eyetech or the ProGrab system from Gordon Harwoods, as both will capture sound and video simultaneously.

If your budget doesn't stretch that far, you can still create animations with Deluxe Paint, Personal Paint or an image rendering package such as Imagine. CanDo has a slight undocumented feature when it comes to synchronising actions to Animations. When you load or pre-load an animation it's possible to refer to it by its buffer name, like this:  
LoadBrushAnim  
"Bigboy:johnanim.animb";"anim"  
SetBrushAnimFlags "anim",FORWARD,1  
ShowBrushAnim "anim",73,54,1  
However, if you trigger the playback of the anim in this way (using the buffer name) then the synchronising feature will not work. The above example would therefore have to use this command for playback:  
ShowBrushAnim  
"Bigboy:johnanim.animb";73,54,1

There are other problems if you are trying to play back lengthy sequences: CanDo requires

the animations and samples to be loaded into memory before playback. They can't be spooled off disk. This is quite a limitation, although there are ways around it using shareware file players available from the Aminet.

CanDo can trigger DOS programs, so it's possible to make use of a program such as VT to play or view images. Make use of CanDo's Public Screen support to integrate everything nicely together. Nevertheless, even a reasonably expanded A1200 can still be used to run very impressive multimedia applications. Short sequences of video and sound can be loaded and displayed in response to user actions. Imagine a multimedia teaching tool (click on the parts of an engine and hear an explanation), or a graphics adventure which you have created using footage from your local town with your friends dressed up as demons. These are the applications for which CanDo was designed, so don't be afraid to let your imagination run riot.



```

BrushAnims false
RemoveBrushAnim "anim"
Let number=frameofanimation("anim")
PrintText number,30,30
ResetBrushAnimFrame "anim",(number+1)
Nop ; BrushAnims true
SetDrawMode JAM1
SetPen 0
AreaRectangle 73,54,162,100
ShowBrush "anim",73,54

```

**2** These were only slightly tricky to work out, so above is the script for the frame advance feature. You should be able to work out how to implement the others from it.

As promised, we can now combine this deck with the multimedia database we've been working on over the past months. The trick is to make use of CanDo's ability to let a deck call another deck. In this case, the database program will be the master or "parent" deck.

When necessary, it will load and execute the video playing deck as a "subdeck" and pass the name of the animation file to play. Sound complicated? Don't worry – it's not that bad. It is however, an amazingly powerful feature. You can launch more than one subdeck as you need them, and subdecks can launch their own decks too.

As you can control whether each deck opens on a public, Workbench or private screen you can create some very impressive applications.

**3** To integrate the two decks, we need to make a slight change to the video display deck. First of all I've saved it under the name "Moviedeck", and renamed the first card "Moviecard".

I then added some scripting to allow the card to accept the name of the animation as a parameter passed to it from the Parent deck. The script below is added to the Moviecard's Before attachment script. As you can see, it loads the animation supplied. Those are all the changes needed to the animation replay deck.

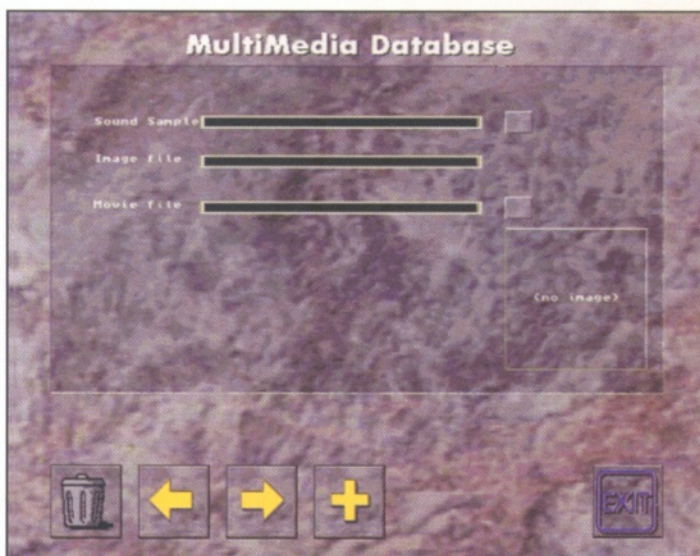
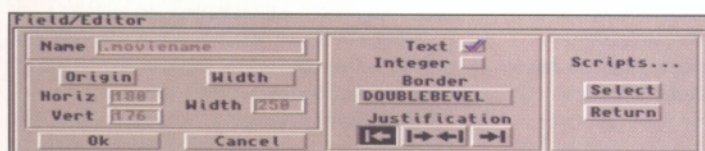
```

Let name=arg1
LoadBrushAnim name,"anim"
SetBrushAnimFlags "anim",FORWARD,1

```

**4** Let's turn our attention back to the database deck. First of all, you'll need to add a new field to join the image and sound filenames.

Give the new field the title "moviename" and remember it is vital to start the name with a full stop. You'll also need to add some text and a new button.



**5** When you have finished making all the adjustments and changes the new display should look just like the example shown above.

**6** Now for the important part: the script which is triggered when the play movie button is pressed. The script needs to load and execute the moviedeck as a subdeck, and also pass the name of the animation file to it. The code is shown below.

If you compare it to the script triggered when the sound sample is played, you'll see strong similarities. Both scripts obtain the filename from the database and then act on it.

In this case, the action consists of loading the subdeck, and then causing it to start in a new display. We also pass the name of the animation file so it can start work. The result is impressive: when browsing the database an animation can be included. One click on the button and the display opens, allowing the animation to be examined in detail. A click on the "Eject" button on the video playscript and it exits, returning the user to the database. ■

```

SetDBObject database[Index]
Let name=database[Index].moviename
If exists(name)
    LoadSubDeck "moviedeck"
    OpenWindow "moviedeck","moviecard",name
Else
    SetPrintFont "topaz",8
    SetPrintStyle PLAIN,2,3
    SetPen 1,0
    SetDrawMode JAM1
    PrintText "Sorry, couldn't find file!",196,202
EndIf

```



# Blitz BASIC

## Part 1

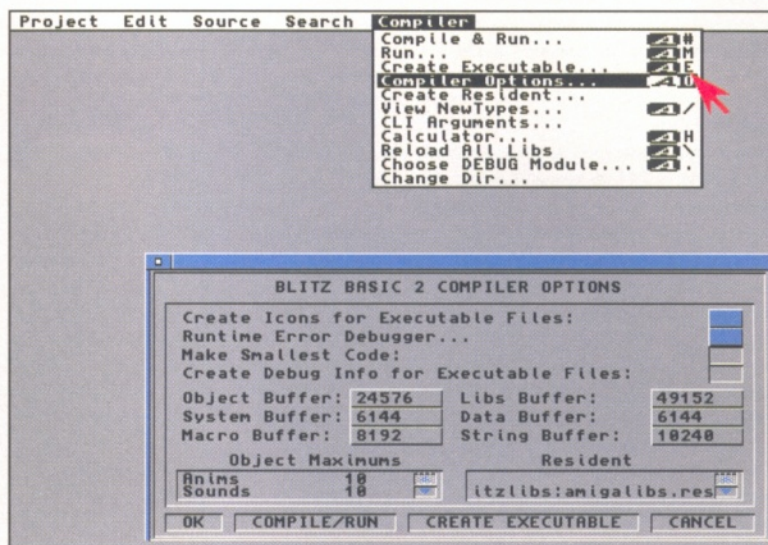
**Paul Overaa** lays to rest a myth about the gremlins that some readers have reported with a particular type of Blitz BASIC gadget use.

**W**e have had several requests for help with the creation and use of gadtool ListView gadgets from Blitz BASIC. These gadgets enable you to scroll through, and optionally select entries from, a list of items which can be as long as memory permits. Reported difficulties range from instances where gadget items can't be selected, to others where the gadget's Arrow buttons refuse to work.

All these problems have resulted from the incorrect use of Intuition IDCMP system flags. These are the values used to tell Intuition which events your program wishes to hear about. In some cases users haven't set any flag values at all and have assumed that suitable event requests are set up whenever Blitz opens a window. On other occasions the code has been almost right, but users have come unstuck at the last hurdle – namely in knowing what values should be used (understandable, since there's not much help provided in the Blitz manual).

More disturbing was that, in almost every case, users were throwing 'magic numbers' into their code to represent system definitions – and this, presumably, means that they don't realise that there's a better way of doing things.

Those of you who followed our BASIC tutorials will know that HiSoft BASIC provides a set of header files which are the equivalent of the official Amiga Include files. Well, Blitz BASIC offers a similar set of files which enable coders



In order to use the precompiled *amigalibs.res* file (which you'll find in the *blitzlibs* drawer of your Blitz installation), you need to choose the *Compiler Options* from *The Compiler* menu and enter '*Amigalibs.res*' in the *Resident* section of the requester that appears.

to use standard system definitions. Rather than just explain about the flag issues, for those readers who have already cracked most of the ListView coding requirements, I will tackle the whole area from the start, so everyone can see how these gadgets are created and used.

### List creation

Creating a Blitz ListView gadget involves a number of distinct steps, the first of which is the definition of a NewType list item structure (instances of this structure will subsequently represent entries in the list). The *Blitz* manual

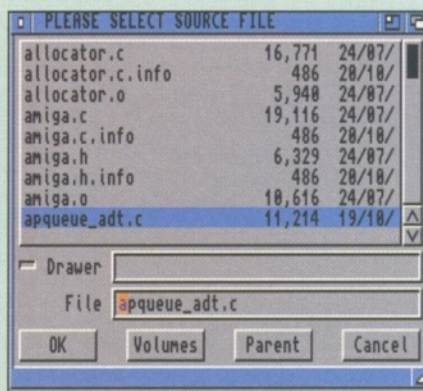
states that the initial fields must be a word-sized field followed by a string which becomes the name of an entry in the ListView gadget:

```
NEWTYPED.item
    flags.w
    text.s
```

End NEWTYPE

The above structure is the minimum required and, providing those first two fields remain intact, you can extend such structures however you like. For example, another two text strings could be associated with each list entry by using this definition:

Blitz's high-level list and gadtool statements make the creation and use of ListView gadgets easy.



### ListView gadgets

```
Window 1,#W_X,#W_Y,#W_W,#W_H,#W_FLAGS,W_TEXT$,1,2
GTags #LAYOUTA_Spacing,#LV_SPACING
GTLstView 1,1,#LV_X,#LV_Y,#LV_W,#LV_H,#LV_TEXT$,#PLACETEXT_BELOW,m()
AttachGTLst 1,1GTLstView
1,#GADGET_MSG_X,#GADGET_MSG_Y,#BOX_W,#BOX_H,0
While NOT (idcmp_event.l=#IDCMP_CLOSEWINDOW)
    idcmp_event=WaitEvent
    Select idcmp_event
        Case #IDCMP_GADGETUP: Gosub PrintMessage
    End Select
Wend
Free Window 1
End
```



```

NEWTYPE.item
  flags.w
  text.s
  mytext1.s
  mytext2.s
End NEWTYPE

```

Any additional structure data will be for your program's private use – as far as the gadtool ListView goes it is only the first two fields that are of interest. Once a suitable NewType definition is available it's necessary to allocate some memory for the list itself. Blitz uses a Dim List statement for this, so if we wanted to allocate space for say, 20, list items we'd do it in this fashion:

```
Dim List m.item(19) ; space for 20 items
```

## List creation

The next step is to create the list by installing the names of the various list entries. For example purposes I have defined the list item names using a set of data statements like this:

```

GadgetEntries:
Data.s "1: A1200 Users Only"
Data.s "2: A4000 users Only"
Data.s "3: Archive Utilities"
Data.s "4: Assembler Programming"
Data.s "5: BASIC Programming"
.etc.

```

and then added these entries into the list using Blitz's AddItem() function in conjunction with a While/Wend loop:

```

Restore GadgetEntries
While AddItem(m())
  Read m()\text
Wend

```

Such an arrangement works because in my example all available list entry space is being filled, so the loop's next use of AddItem() results in a failure error indicator that breaks the loop. If you were allocating more list space than that likely to be used, an alternative loop exit condition would be needed.

Once you've got to this stage, all you need to produce the corresponding ListView gadget on the screen is a GTListView statement, which sets up the gadget itself, followed by a call to Blitz's AttachGTLList command to physically attach the gadget to the window. It should be easy, but it's from this area onwards that a lot of code falls to pieces.

## Flags and definitions

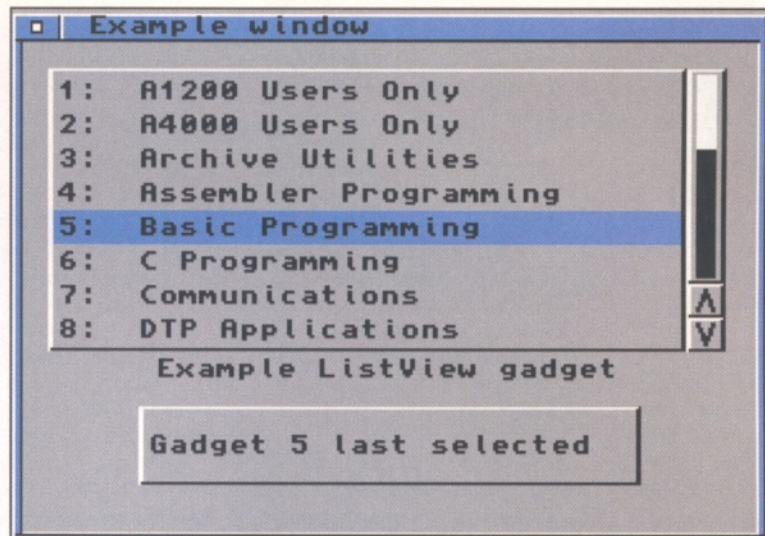
Gadtool gadgets are driven by messages coming into the window you've set up, so it's essential to get the IDCMP event request flags right for the gadgets you are using. For ListView gadgets this means gadget up, gadget down, mouse button, mouse move and intuitick messages. The window that the example program uses also has a close gadget attached to it, so IDCMP close window events have also been required in this case.

The IDCMP flags are represented as the bit positions of a longword (32-bit) number. The mouse button event flag for example is represented by the bit 3 position, i.e.:

```
0000 0000 0000 1000
```

hence the flag has a numerical value \$8.

Other event flags also have equivalent numerical values depending on which bit of the number they represent. This means that Blitz's



*This month's example is short – but it contains all the essentials needed for you to use ListView gadgets in your own program.*

**Gadget 5 last selected**

**Blitz provides an easy to use GTBevelBox statement for drawing gadtool-style boxes (see coverdisk code for use details).**

DefaultIDCMP statement can be used to set up the required event stream by ORing the various flags using statements like:

```
DefaultIDCMP $200 | $400000 | $40 | $20 | $10 | $8
```

If you choose to collect the relevant flag values together, even this statement would set the required event flags:

```
DefaultIDCMP $400278
```

Providing you get these values right everything is fine. In the above cases both would work, but in general such shorthand definitions are asking for trouble. You may look up incorrect values to start with, or perhaps combine them wrongly. Chances are that you'll forget what the various numbers mean anyway and this leads to the possibility of making further slips when re-using or modifying such code at a later date. This is why embedded numbers like these are called 'magic numbers'.

In other words the embedded numbers style of coding is a long-term recipe for disaster and it is best to avoid the practice. How? Well, all these flags are available as named constants in the Blitz header files, and all you have to do is include either the appropriate portions of these Blitz headers in your code, or specify the amigalibs.res module (which contains all the associated flag definitions in precompiled form) in the Resident portion of the compiler options requester. Either way you are then able to use constant definitions, such as #IDCMP\_MOUSEBUTTONS, without having to know what value that particular flag represents. With this approach the IDCMP event flags required for the ListView gadget plus window close gadget detection could be written thus:

```

DefaultIDCMP #IDCMP_CLOSEWINDOW
| #IDCMP_INTUITICKS      AddIDCMP
#IDCMP_GADGETUP          |
#IDCMP_GADGETDOWN        | AddIDCMP
#IDCMP_MOUSEMOVE         |

```

### #IDCMP\_MOUSEBUTTONS

This form provides a visible reminder of the events that will be arriving at a window's IDCMP port. There is an alternative approach that, strictly

speaking, is the one that should be used. The gadtools.bb2 Include file provides a combined flag set for the ListView gadget flags as the constant called #LISTVIEWIDCMP, so to set up the appropriate event flags all you really need is this statement:

```
DefaultIDCMP #IDCMP_CLOSEWINDOW | #LISTVIEWIDCMP
```

One line of code and you still don't need to worry about, or manipulate, the individual bits involved, which means less chance of mistakes.

## Gadget creation

The main part of the example code on this month's coverdisk is shown in Listing 1. Once a window is open the gadget can be set up and installed by using Blitz's GTListView and AttachGTLList statements. Prior to this GTTags can be used to specify any tags required and I've used just one, the #LAYOUTA\_Spacing tag which enables you to adjust the space between the displayed list entries. Notice too that a constant #PLACETEXT\_BELOW has been used in the GTListView command. This is a standard gadtool library constant which enables you to choose where the gadget label is going to appear. Again, its use eliminates what would, otherwise, be another magic number in your code. Remember that you can find all these tags and constant definitions in the intuition.bb2 and gadtools.bb2 header files that come with Blitz BASIC.

Once the list has been set up and the ListView gadget attached to a window the code waits in an event loop. This listens for events as they come in and terminates the moment a #IDCMP\_CLOSEWINDOW event is detected. The number of the item selected from the list has to be obtained by using Blitz's EventCode() function. If you examine just the value returned by Blitz's WaitEvent command all you'll get is the identity number of the ListView gadget itself.

And that's it. No gremlins to watch out for, other than those faulty flag definitions and, once you've seen a ListView gadget used once, you'll realise that it's all straightforward. ■



# Talking Shop

*Confusion over Coverdisks and sympathetic feelings over Aural Synthetica are among the mixed bag of letters David Taylor has the pleasure of replying to this month.*

**I**t's encouraging to read a bit more enthusiasm in this month's selection of letters – and even some chantings of 'Long live the Amiga!'. Great stuff!

## Keep it up!



£25 Winner

I wasn't surprised by P. Greenwood's letter in the August issue of AS who has now bought a PC. But I do feel great sadness about the current situation. I have been a subscriber to AS since issue 1 and thought that I should write to tell you that there is at least one reader who has remained faithful to the Amiga and to your brill mag.

But in all that time I have never been as depressed with the situation as I am now. I first saw a prototype A1000 in 1984 and it knocked my socks off. Digital sound, the bouncing ball demo and a draggable multitasking workbench that was just dragged over the bouncing ball with ease! And what were the PCs doing at the time? No windows in sight, just a silly prompt.

I have just bought my fourth Amiga and use it for video work and still no other machine can beat it for a straight 15KHz video signal and its superior operating

system. With my SCSI-II interface my machine now boots up in about five seconds – the PC is still checking its memory at this point!

And as for Windows 95, what a load of hype. The PC can now multitask – well, gee whizz, are we supposed to be impressed? The Amiga has been doing it for years. The sad part is, however, that most of the public don't know this and they just think that a computer can only do something if Microsoft offers a solution for it.

But just in case you think I hate all machines except the Amiga, I don't. A close second to the Amiga is the Mac. This, too, has had a natural GUI (by natural I mean not a facade front end to a DOS backend) since its birth.

Despite the shrink in size I still support AS for supporting the Amiga and I will renew my subscription which runs out this month. I urge all fellow Amigans to do the same and continue supporting our favourite machine over a difficult period.

Long live the Amiga!

**Mr. B. C. Hughes**  
Blackwood, Gwent

*Well, I hope you managed to get your renewal in before they stopped allowing them. It's true that the Amiga has a far more natural way of multitasking than the PC. Windows 95 does the*

*best of a bad job and although it does multitask, it is a shamefully large, unwieldy piece of software which requires massive overheads to operate properly. Still, in comparison to legacy Windows, you can see why PC owners are over the moon.*

*However, we can't just sit back and complain bitterly that we are misunderstood and that we would have been there too were it not for this, that or the other. It can't be denied that the Amiga needs a new look, a hot processor, a reworked Workbench taking in some of the good points of other operating systems – they do exist! Otherwise, there will be no end to this spiral.*

## Tell us more!

While I admire your mag immensely and the recent changes seem sad but necessary, I feel some of your reviews are lacking in explanation. As an example, the DAT review was excellent but a few details were missing, for example: which Amigas does it work on? What hardware/software do you need? How much is it? Does it back up individual files and DMS'd floppy disks or just the whole hard drives?

All these things may seem superfluous to you, but as a A1200 owner, I am not going to spend £400 on one on the strength of your article. In future please consider that we need to know all the details.

If you are looking for review ideas, what about CD-ROM writers? There are now a batch of them at ever decreasing prices, also flatbed scanners.

Everybody seems to be going Internet crazy, but what about the BBSs? Isn't it time for an update? (Personally, I'd like to find out how to use Hydra.) Is it worth the extra

money going for a 33,600 instead of a 28,800 modem?

Finally, why not ask users to send in details of anything unusual they've done to their Amigas...

**Mr. H. C. Cope**  
Stoke on Trent

*You are right. We normally ensure that all the relevant information is included. But better late than never: the DAT drive will work on any machine with a SCSI interface, and it will back up anything you can back up on floppy using your backup program, only a lot faster. As such, the only memory requirements are what you will need for your backup program and the only hardware requirements are a SCSI controller. As for the price, well, I bought that particular drive for £450, but it isn't that up-to-date a model, so have a look around.*

*As for reviews, CD writers may have come down in price, but they are still too expensive for most users, I'm afraid. Still, thanks for the comments, we shall certainly heed them.*

## Same old story

Now that Escom is closing a lot of its British stores due to financial difficulties with its German parent company, where exactly does this leave our beloved Amiga?

Talk about *deja-vu*! We are in the same predicament we were in when Commodore UK faced similar problems – and look what happened. I can see Escom going the same way and finally having to call in the receivers.

I do not wish to sound overly pessimistic, but can you really see AS, or any of the other Amiga magazines, still being with us a year or so down the road?

**C. Burley**  
Sheffield

## How to contact us



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All the letters received at these addresses will be considered for publication, unless you specifically advise us otherwise.



Yes, it does seem to be the same old story. But Escom has gone and VLScorp is doing some work. The question is: will it be quickly enough? If it does happen soon, then maybe we'll see new users and AS and others will be around for years to come. If not, then the market will shrink further. It's not as if we can take a bullish stance and pretend all is fine and that AS is doing better than ever. It's not.

We are doing very well considering what resources we have, but it's a far cry from the heady days of hundreds of pages.

## Deeply confused

On the July Coverdisk, one of the archives is DeepX (deep compressor). The archive does exist but the actual executable doesn't seem to be there!

On a happier note, I enjoy reading your magazine. Great what you can do in the space provided. I was dismayed on page 41 to see the 3.5-inch drive bay of a 4000 filled with an LCD. Wouldn't an internal CV or tape streamer be of more use and/or cheaper than an external one? The article was thought provoking, though. Thanks for an informative publication.

Tom Haslam  
Leicester

I don't know what has happened there. However, you'll have been glad to see that newer versions of DeepX have been included. If you don't have them, then get hold of the latest version from Aminet or a PD house - you should always have the latest version anyway because a bug might have been fixed or important new features added. Thanks for the kind comments. It's nice to get such positive letters after wading through all the negative ones!

## Call for help

For the last 18 months I have saved up towards the cost of buying one or more versions of AmiBack Tools, DiskSalv 3 and Quarterback Tools/QB Tools Deluxe as well as AmiBack/Quarterback version 5.

I would like to know if these products are still available commercially or not. If the developers are no longer trading, then what happens to the copyright, and so on? Would it be possible for the programs to be included on future AS Coverdisks?

Grenville Dixon  
Aylesford, Kent

Well, as you can see from this issue, the Quarterback Tools collection has been relaunched. Read our review this issue (see page 26) and order the package from Wizard Developments.

## Name unknown

Hello! Louisiana to David. Come in David. This is 'Name Unknown, Louisiana, USA' (Talking Shop, AS August 1996 issue).

Perhaps you didn't believe my goofy name, but since it is of English derivation I'd think it more common there than here. Or could it be that the second page of my letter was misplaced?

In any event, I was pleased to see a part of my letter in AS and I look forward to seeing a response to my graphic board software system question at some point.

Finally, I was surprised to see my letter listed as the £25 winner since there was no-one to send it to. I can only hope that you donated it to some appropriate charity. Now you can do it in my name if you wish. Thanks!

Barlow Soper  
Louisiana, USA

Ah! Yes, well what happened is that your letter contained parts for Amiga Answers and parts for Talking Shop. The half with your name on went off to an expert and the Talking Shop bit was left anonymous. A lack of forward thinking really. Once more, thanks for the words.

## Bye bye

I have read your magazine since the first issue and collected all of the Coverdisks that were full of useful utilities and other software. But I'm sorry to say that I probably won't be buying your magazine any longer. It just isn't packed with the usual reviews, ads and tutorials. In fact it's paper thin and even the Coverdisks don't make up for the £4.50 price.

John A. Kinsella  
Bellshill, Strathclyde

I do understand your reasons, but believe me, if I could do anything about it, I would. The changes were bound to lose readers, but it put us back above the line and has allowed us more issues. At least we still give those who want to the chance to buy us and you'd be surprised how many are glad of that. We do still offer reviews and features and a quality of information that eludes others.

## Amiga C

I have recently been given a copy of AS January 1994, and with this magazine there is a sample edition of Complete Amiga C by Cliff Ramshaw. As this issue is now over two years old, I would imagine that the offer for the full version is now closed.

I was wondering if you could help me to find out if this package is still available, and, if so, where I might be able to purchase a copy.

S. J. Ceaton  
Crawley

*I'm afraid that the book is out of print. It does, however, pop up for sale occasionally in the Reader Ads section (page 32), so maybe you can keep your eye out there to get hold of it. We don't even have a copy left in the office.*

## Aural Synthetica

Concerning Maff Evans' review of Aural Synthetica in AS62 (May 1996). I have to state that you are quite right in saying that Aural has its bad points, mostly concerning the way one gets to the guts of the program.

A programmer has to realise that in order to write a successful program you have to think like a musician/sound designer. Aural has managed to design screens which ensure that the secrets remain secret for as long as possible. This, combined with the long rendering times you have on lower-end Amigas, is indeed fatal as you say in your review.

This all came to mind because I work with an old program called Synthia-Pro. It's from the US and the manual is dated 1989, "the Other Guys Software". It cost me £20 at a trade show. It functions with Workbench 1.3 only and yes, it also needs a 68020 or better with extra fast memory. Let's face it, rendering is always memory hungry and processor-intensive. Still, Synthia-Pro is faster! Furthermore, it has important qualities that Aural is missing.

The design of the program falls between Turbosound and Aural. But it's not an attempt to virtually imitate a real modular synthesizer like Turbo. Instead, it tries to make the best of the way a computer (windows per tool) can work. And from that point the programmers have successfully designed the parameters in such a way that you can get familiar with the synthesis options per window. After all, what you essentially do is

process samples, from one level to another until you are satisfied. That's not the same as processing a continuous source of audio signals and voltages. So, in Synthia-Pro you open or close as many windows as you need when you are processing. It reminds me more of the graphics processing of Personal Paint.

The options in the windows can be as difficult as you want them to be. The end results can be saved 8-bit or 16-bit in various formats. On top of that you can play them four-voice polyphonic on your computer keyboard or velocity-sensitive with a MIDI-interface and a MIDI-keyboard. Thus, you can hear a sound in a chromatic context immediately after processing! What's more, you can save complete setups for samplers such as Ensoniq, Roland and Korg. And, of course, you can save them as RAW or 8SVX for Amiga specific purposes (OctaMED/AudioMaster/Musix-X/Sonix/Bars & Pipes, and so on).

The starting points in Synthia-Pro are easily recognisable with a pull-down menu for 'synths', where you find things like 'subtractive synthesis', 'drum synthesis', 'FM/PD synthesis', 'plucked strings synthesis', 'Chorus', 'Pitch-shifter', 'echo/reverb', 'equaliser', 'distortion' and many more. As I said before, it all represents familiar items from the musical world, so that your learning curve isn't steep.

It surprises me that you didn't mention this software in your article. It could have been a starting point from which other software (like Aural) could be measured. Does anyone know of the existence of Synthia-Pro? The only article I found was in an old German magazine, plus one mention of the program on a PD disk. In my opinion, this program would be a killer, if it were to be re-released and updated.

R. H. Visser  
Holland

*We don't normally compare packages unless they are both currently available and unless they give the reader a valuable point of reference. I'm sure Maff will be interested in your comments, as will other readers, but the review was of Aural and its problems. If we had mentioned a product that showed what could be done, but nobody had heard of it, it wouldn't have really helped readers to understand the faults we found with that particular program.*



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# AMIGA

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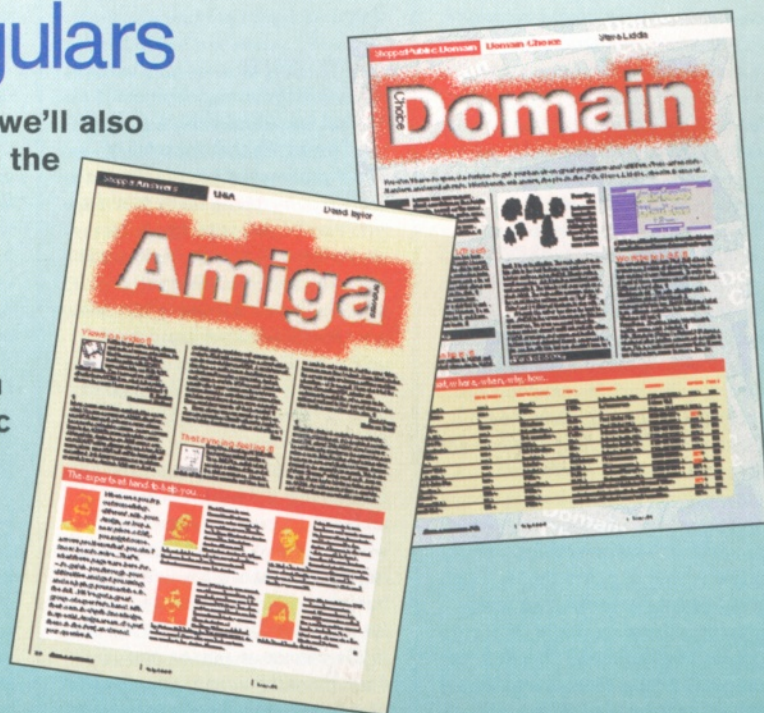
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# AMIGA REVIEW

## Welcome to our new magazine

David Pettifer is the editor of *Amiga Review*.  
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**W**ell hello Amiga Shopper® readers. Thank you for taking the time out to read this advert for our new magazine, *Amiga Review*. Released on 1st August, *Amiga Review* is a mail-order-only magazine created entirely using Amigas complete with coverdisks that covers all aspects of the Amiga market, but as you're readers of *Amiga Shopper*, we know you're most interested in the serious things your Amiga can do, and *Amiga Review* is full of productive, serious features, reviews and interviews.

Issue one contains features on buying and choosing a printer, PostScript printing, Desktop Publishing, ProPage DTP, Blitz Basic, how we make *Amiga Review*, upgrading your Amiga, details of the new Amiga computer, information on the VISCORP buyout, getting on the Internet, sampling, a review of *Em Magazine*, running your own software co. and more!

Issue two is on sale 10th September, and will be packed with more serious features, including the first of a series of ProPage and AMOS Professional tutorials, suitable for both beginners and experts alike, interviews with Mutation Software and Epic Marketing, columns from both of these companies and more key figures in the industry from F1 Licenceware to Vulcan Software, info on image-processing (we show you how to do it!), a new magazine coming out called *The Domain*, the *Digita & Softwood* war, CD-ROMs, scanning, the best of the glossy magazines and more opinionated columns for you to read. For details on ordering, see right! **David Pettifer.**

## SuperDisks

Every issue of *Amiga Review* always has at least two SuperDisks attached to the front. One is tailored for the games player, *AmigaGamer* - this month (*Sept, issue two*) packed with a demo of *Valhalla 3 SuperSerious* - full of serious software demos, sound samples, clip-art, and more. At the time of writing, we're just about to contact *Softwood* about a demo of *Final Writer/Final Data*. Call 01983 867377 for more info!

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